

THE  
**NEW ZEALAND GAZETTE.**

Published by Authority.

WELLINGTON, THURSDAY, JULY 11, 1935.

*Additional Land at Tawa Flat taken for the Purposes of the Wellington-Foxton Railway.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

WHEREAS it has been found desirable for the use, convenience, and enjoyment of the Wellington-Foxton Railway to take further land at Tawa Flat in addition to land previously acquired for the purposes of the said railway:

Now, therefore, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, in exercise of the powers and authorities conferred on me by sections thirty-four and two hundred and sixteen of the Public Works Act, 1928, and of every other power and authority in anywise enabling me in this behalf, do hereby proclaim and declare that the land described in the Schedule hereto is hereby taken for the purposes above mentioned.

SCHEDULE.

APPROXIMATE areas of the pieces of land:—

A.	R.	P.	
0	0	37.34	Part Section 47, Porirua District.
0	0	0.34	„ 47, „
0	0	7.78	„ 45, „

Situated in Blocks V and VII, Belmont Survey District, Makara County. (S.O. 2758.)

In the Wellington Land District; as the same are more particularly delineated on the plan marked L.O. 3548, deposited in the office of the Government Railways Board at Wellington, and thereon coloured purple and blue.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 2nd day of July, 1935.

R. MASTERS, for Minister of Railways.

GOD SAVE THE KING!

(L.O. 12551.)

A

*Declaring a Portion of Railway Land, Manaia Branch Railway, to be Crown Land.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

WHEREAS by section thirty-five of the Public Works Act, 1928, it is provided that in the case of any land taken, purchased, or acquired for a Government work, and not required for that purpose, the Governor-General may, on recommendation by the Minister, by Proclamation declare such land to be Crown land subject to the Land Act, 1924, and thereupon the land may be administered and disposed of under that Act accordingly:

Now, therefore, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers and authorities conferred on me by section thirty-five of the Public Works Act, 1928, and of every other power and authority in anywise enabling me in this behalf, do hereby proclaim and declare the land described in the Schedule hereto to be Crown land subject to the Land Act, 1924.

SCHEDULE.

APPROXIMATE area of the piece of land: 3 acres 0 roods 12.3 perches.

Being railway land adjoining Manaia Road, Old Manaia Road, Sections 45, 46, and 47, part Lots 1 and 2, D.P. 575, of Section 23, part Lot 3, D.P. 325, of Section 22, and part Lot 4, D.P. 2903, of Section 24.

Situated in Block XV, Kaupokonui Survey District, Waimate West County.

In the Taranaki Land District; as the same is more particularly delineated on the plan marked L.O. 3575, deposited in the office of the Government Railways Board at Wellington, and thereon coloured red.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 2nd day of July, 1935.

R. MASTERS, for Minister of Railways.

GOD SAVE THE KING!

(L.O. 13408.)

*Land proclaimed as a Road in Block VIII, Hukerenui Survey District, North Auckland Land District.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

IN pursuance and exercise of the powers conferred by section twelve of the Land Act, 1924, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby proclaim as a road the land in Hukerenui Survey District described in the Schedule hereto.

SCHEDULE.

LAND PROCLAIMED AS A ROAD.

APPROXIMATE area of the piece of land proclaimed as a road :  
27 acres 1 rood 24 perches.

Being portion of Puhipuhi State Forest.

Situated in Block VIII, Hukerenui Survey District. (S.O. plan 27925.)

In the North Auckland Land District; as the same is more particularly delineated on the plan marked L. and S. 16/2282, deposited in the Head Office, Department of Lands and Survey, at Wellington, under No. 2743, and thereon coloured red.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 6th day of July, 1935.

E. A. RANSOM, Minister of Lands.

GOD SAVE THE KING!

(L. and S. 16/2282.)

*Proclaiming Unclaimed Land in Pirongia District, Auckland Land District, to be Crown Land.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

WHEREAS by section twenty-two of the Reserves and other Lands Disposal and Public Bodies Empowering Act, 1921-22, it is enacted that, after not less than three months' notice in the *Gazette*, and in such newspapers as he thinks fit, of his intention so to do, the Governor-General may declare that the lands referred to therein, or any portion of those lands, shall, from a date to be specified in the Proclamation, be deemed to be Crown lands available for disposal under the Land Act, 1924:

And whereas the prescribed notice has been given in the *Gazette* and in certain newspapers:

Now, therefore, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers conferred upon me by section twenty-two of the Reserves and other Lands Disposal and Public Bodies Empowering Act, 1921-22, do hereby proclaim and declare that the land described in the Schedule hereto (being portion of the lands referred to in the said section twenty-two) shall, from and after the date of publication hereof in the *Gazette*, be deemed to be Crown land available for disposal under the Land Act, 1924.

SCHEDULE.

AUCKLAND LAND DISTRICT.

ALLOTMENT 363, Town of Pirongia East: Area, 1 acre.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 5th day of July, 1935.

E. A. RANSOM, Minister of Lands.

GOD SAVE THE KING!

(L. and S. 22/2614/1.)

*Road closed in Block VIII, Opaku Survey District, Taranaki Land District.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

IN pursuance and exercise of the powers conferred by section twelve of the Land Act, 1924, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby proclaim as closed the road in Opaku Survey District described in the Schedule hereto.

SCHEDULE.

APPROXIMATE areas of the pieces of road closed:—

A.	R.	P.	Adjoining
1	1	0	} Section 5, Block VIII, Opaku Survey District
0	0	26	

In the Taranaki Land District; as the same are more particularly delineated on the plan marked L. and S. 26/11938, deposited in the Head office, Department of Lands and Survey, at Wellington, under No. 2742, and thereon coloured green.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 6th day of July, 1935.

E. A. RANSOM, Minister of Lands.

GOD SAVE THE KING!

(L. and S. 26/11938.)

*Land proclaimed as a Road, Road closed, and Land taken in Blocks XI and XV, Opihi Survey District, Geraldine County.*

[L.S.] GALWAY, Governor-General.  
A PROCLAMATION.

IN pursuance and exercise of the powers conferred by section twelve of the Land Act, 1924, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby proclaim as a road the land in Opihi Survey District described in the First Schedule hereto; and also do hereby proclaim as closed the road described in the Second Schedule hereto; and I do also hereby take the land described in the Third Schedule hereto for the purposes of subsection ten of the said section twelve.

FIRST SCHEDULE.

LAND PROCLAIMED AS A ROAD.

APPROXIMATE areas of the pieces of land proclaimed as a road:—

A.	R.	P.	Being Portion of
0	3	14.1	} Rural Section 25682, Block XV; coloured red.
1	0	28.4	
0	0	34.3	} Rural Section 26417, Block XI; coloured red.
0	1	32.9	
0	0	1.4	} Rural Sections 27121 and 31640, Block XI; coloured red.
0	0	1.0	
0	3	20.1	
1	3	16.8	

SECOND SCHEDULE.

ROAD CLOSED.

APPROXIMATE areas of the pieces of road closed:—

A.	R.	P.	Adjoining or passing through
0	1	21.1	} Rural Section 25682, Block XV; coloured green.
0	2	27.5	
0	1	33.0	} Rural Section 26417, Block XI, and Rural Sections 28657 and 31762, Block XV; coloured green.
0	0	37.6	
0	0	3.6	} Rural Section 26417, Block XI; coloured green.
0	0	30.3	
0	0	3.3	} Rural Sections 28657 and 32605, Block XV; coloured green.
0	3	18.3	
1	3	7.2	} Rural Sections 23775, 23776, 24309, and 31640, Block XI; coloured green.

THIRD SCHEDULE.

LAND TAKEN.

APPROXIMATE areas of the pieces of land taken:—

A.	R.	P.	Being Portion of
0	0	4.3	} Rural Section 26417, Block XI; coloured yellow.
0	0	0.04	

All situated in Opihi Survey District (Canterbury R.D.) (R.D. 979/183.)

All in the Canterbury Land District: as the same are more particularly delineated on the plan marked P.W.D. 89636, deposited in the office of the Minister of Public Works at Wellington, and thereon coloured as above mentioned.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 5th day of July, 1935.

JOHN BITCHENER, Minister of Public Works.

GOD SAVE THE KING!

(P.W. 45/841.)

*Crown Land set apart for Irrigation Purposes (Maniototo Scheme), Town of Ranfurly.*

[L.S.] GALWAY, Governor-General.

A PROCLAMATION.

IN pursuance and exercise of the powers and authorities vested in me by the Public Works Act, 1928, and of every other power and authority in anywise enabling me in this behalf, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby proclaim and declare that the Crown land described in the Schedule hereto is hereby set apart for irrigation purposes (Maniototo Scheme); and I also hereby declare that this Proclamation shall take effect on and after the twenty-second day of July, one thousand nine hundred and thirty-five.

SCHEDULE.

APPROXIMATE area of the piece of Crown land set apart: 2 roods.

Being Sections 6 and 8.

Situated in Block VIII, Town of Ranfurly.

In the Otago Land District; as the same is more particularly delineated on the plan marked P.W.D. 87108, deposited in the office of the Minister of Public Works at Wellington, and thereon edged red.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 6th day of July, 1935.

JOHN BITCHENER, Minister of Public Works.

GOD SAVE THE KING!

(P.W. 64/2.)

*Land in Block III, Waitara Survey District, Clifton County, taken for the Purpose of a Site for the Storage and Fabrication of Materials, and Storage and Repair of Vehicles, Machinery, and other Plant for use by or on behalf of the Corporation of the Chairman, Councillors, and Inhabitants of the County of Clifton in carrying out any Public Works which the Council of the County may be lawfully authorized to carry out.*

[L.S.] GALWAY, Governor-General.

A PROCLAMATION.

IN pursuance and exercise of the powers and authorities vested in me by the Public Works Act, 1928, and of every other power and authority in anywise enabling me in this behalf, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby proclaim and declare that the land described in the Schedule hereto is hereby taken for the purpose of a site for the storage and fabrication of materials, and storage and repair of vehicles, machinery, and other plant for use by or on behalf of the Corporation of the Chairman, Councillors, and Inhabitants of the County of Clifton in carrying out any public works which the Council of the County may be lawfully authorized to carry out, and shall vest in the said Chairman, Councillors, and Inhabitants of the County of Clifton as from the date hereinafter mentioned; and I do also declare that this Proclamation shall take effect on and after the fifteenth day of July, one thousand nine hundred and thirty-five.

SCHEDULE.

APPROXIMATE area of the piece of land taken: 1 rood 0-24 perches.

Being Section 85, Urenui Township.

Situated in Block III, Waitara Survey District. (S.O. 7376.)

In the Taranaki Land District; as the same is more particularly delineated on the plan marked P.W.D. 89748, deposited in the office of the Minister of Public Works at Wellington, and thereon edged pink.

Given under the hand of His Excellency the Governor-General of the Dominion of New Zealand, and issued under the Seal of that Dominion, this 11th day of July, 1935.

JOHN BITCHENER, Minister of Public Works.

GOD SAVE THE KING!

(P.W. 53/144.)

*Amending Regulations under the Hunter Gift for the Settlement of Discharged Soldiers Act, 1921.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred on him by the Hunter Gift for the Settlement of Discharged Soldiers Act, 1921 (hereinafter referred to as "the said Act"), and in pursuance and exercise of every other power enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby amend, in the manner and to the effect set forth in the Schedule hereto, the regulations under the said Act made on the sixteenth day of July, one thousand nine hundred and twenty-eight, and published in the *Gazette* of the nineteenth day of July, one thousand nine hundred and twenty-eight, at page 2230, as amended by the regulations made on the eleventh day of May, one thousand nine hundred and thirty-two, and published in the *Gazette* of the nineteenth day of May, one thousand nine hundred and thirty-two, at page 1293 (hereinafter referred to as "the said regulations").

SCHEDULE.

CLAUSE 9 of the said regulations is hereby amended by omitting from the definition of "Orphan child" the words "or a child legally adopted by such discharged soldier before leaving New Zealand on active service," and substituting the words "or a child legally adopted by such discharged soldier prior to his decease."

A. W. MULLIGAN,

Acting Clerk of the Executive Council.

(L. and S. 21/88.)

*Authorizing Hamilton Joseph Redwood, of Okoha, Havelock, to use Water for the Purpose of generating Electricity.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

PURSUANT to the Public Works Act, 1928, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council, doth hereby grant to Hamilton Joseph Redwood, of Okoha, Havelock, a license subject to the conditions hereinafter set forth to obstruct, impound, or divert the waters of an unnamed stream in Section 4, Block III, Gore Survey District, and to take and use therefrom for the purposes hereinafter set forth a stream of water not exceeding one-eighth of a cubic foot per second at any one time.

CONDITIONS.

I. IMPLIED CONDITIONS.

THE conditions directed to be implied in all licenses by the Water-power Regulations, 1934, shall be incorporated in and shall form part of this license, except in so far as the same may be inconsistent with the provisions hereof.

## 2. LICENSE SUBJECT TO REGULATIONS.

This license is issued under the Water-power Regulations, 1934, and is subject thereto and to the Electrical Supply Regulations, 1927, and the Electrical Wiring Regulations, 1927, and to any regulations made in amplification or amendment thereof or in substitution therefor.

## 3. UTILIZATION OF WATER AND LOCATION OF HEADWORKS.

Water shall be used under this license solely for the purpose of generating electricity, and shall be taken from the stream at a point in Section 4, Block III, Gore Survey District, in the Marlborough Land District, as indicated on the plan marked P.W.D. 88689, deposited in the office of the Minister of Public Works.

## 4. GENERAL DESCRIPTION OF WORKS.

The licensee is hereby authorized, subject to the conditions hereof, to construct, maintain, and use the following works for the purposes of this license, the position of the said works being indicated on the said plan P.W.D. 88689:—

- (a) Headworks consisting of dam and intake giving a static head of 300 ft.
- (b) Head-race and pipe-line from such headworks to the power-house hereinafter described.
- (c) Power-house with all necessary equipment, including water turbines, generators, transformers, lightning-arresters, switchboards, switches, exciters, and other appliances for generating electricity.

## 5. DURATION OF LICENSE.

This license shall, unless sooner determined, continue in force until the 31st day of March, 1956.

## 6. SYSTEM OF SUPPLY.

The system of supply shall be as described in paragraph (c) of clause 5 of the Electrical Supply Regulations, 1927. The generating voltage and the transmission voltage shall be approximately 110 volts direct current.

## 7. RENTAL.

For the purpose of assessing the rental or annual sum payable in respect of the license, the licensee shall install a suitable maximum-demand indicator to the satisfaction of the Inspecting Engineer of the Public Works Department, and, failing such installation, the rental shall be determined on the maximum capacity of the generating plant installed. The present plant is rated at 1.65 kilowatts, and falls within the classes described in paragraph (b) of clause (2) of Regulation 6 of the Water-power Regulations, 1934.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 26/1744.)

*Canelling the Vesting of a Reserve in the Selwyn County Council.*

GALWAY, Governor-General.

## ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS the land described in the Schedule hereto is vested in the Chairman, Councillors, and Inhabitants of the County of Selwyn for Road Board purposes:

And whereas it is expedient that the vesting of the said land as hereinbefore referred to should be cancelled, and the Chairman, Councillors, and Inhabitants of the County of Selwyn have duly consented to such cancellation:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred upon him by subsection one of section ten of the Public Reserves, Domains, and National Parks Act, 1928, doth hereby cancel the vesting in the Chairman, Councillors, and Inhabitants of the County of Selwyn of the land described in the Schedule hereto.

## SCHEDULE.

## CANTERBURY LAND DISTRICT.

RESERVE 2168, Block XVI, Hororata Survey District: Area, 19 acres 0 roods 32 perches, more or less.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(L. and S. 6/5/50.)

*Canelling the Vesting of Part of a Reserve in the Selwyn County Council.*

GALWAY, Governor-General.

## ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS the land described in the Schedule hereto is part of a reserve vested in the Chairman, Councillors, and Inhabitants of the County of Selwyn for a gravel-pit:

And whereas it is expedient that the vesting of the said land as hereinbefore referred to should be cancelled, and the Chairman, Councillors, and Inhabitants of the County of Selwyn have duly consented to such cancellation:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred upon him by subsection one of section ten of the Public Reserves, Domains, and National Parks Act, 1928, doth hereby cancel the vesting in the Chairman, Councillors, and Inhabitants of the County of Selwyn of the land described in the Schedule hereto.

## SCHEDULE.

## CANTERBURY LAND DISTRICT.

ALL that area, containing by admeasurement 13 acres 0 roods 3 perches, more or less, and being part of Reserve 2285, Block XVI, Hororata Survey District, and bounded as follows: Towards the north-east by Hartnell's Road, 571.5 links; towards the south-east by Section 32739, 2599.6 links; towards the south-west by a public road, 860.2 links; and towards the north-west by other part of Reserve 2285, 1956.75 links. As the same is more particularly delineated on the plan marked L. and S. 6/5/50, deposited in the Head Office, Department of Lands and Survey, at Wellington, and thereon bordered red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(L. and S. 6/5/50.)

*Canelling the Reservation over a Reserve in the Totara Survey District, Westland Land District.*

GALWAY, Governor-General.

## ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers and authorities conferred upon him by subsection one (b) of section seven of the Public Reserves, Domains, and National Parks Act, 1928, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby cancel the reservation for ferry purposes over the land described in the Schedule hereto; and doth hereby declare that the said land, being vested in the Crown, is Crown land available for disposal under the Land Act, 1924.

## SCHEDULE.

## WESTLAND LAND DISTRICT.

RESERVE No. 238, Block I, Totara Survey District: Area, 3 acres 2 roods 21 perches, more or less.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(L. and S. 6/9/60.)

*Changing the Purpose of Part of a Reserve in Block VII, Westerfield Survey District, Canterbury Land District.*

GALWAY, Governor-General.

## ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS the land described in the Schedule hereto forms part of a reserve duly set apart for a gravel-pit:

And whereas it is expedient that the purpose of the reservation over such land shall be changed to an addition to a public-school site:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in exercise of the powers and authorities conferred upon him by subsection one (a) of section seven of the Public Reserves, Domains, and National Parks Act, 1928, doth hereby declare that the purpose of the reservation over the land described in the Schedule hereto is hereby changed from a gravel-pit to an addition to a public-school site.

SCHEDULE.

CANTERBURY LAND DISTRICT.

ALL that area containing by admeasurement 1 acre, more or less, and being part of Reserve 1409, Block VII, Westerfield Survey District, and bounded as follows: Towards the north-east by the Ashburton-Staveley Main Highway, 200 links; towards the south-east by Rural Section 22285, 500 links; and towards the south-west and north-west by other part of Reserve 1409, 200 links and 500 links respectively. As the same is more particularly delineated on the plan marked L. and S. 6/5/226, deposited in the Head Office, Department of Lands and Survey, at Wellington, and thereon bordered red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
(L. and S. 6/5/226.)

*Directing Sale of Railway Land at Bennett's Junction under the Public Works Act, 1928.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by the thirty-fifth section of the Public Works Act, 1928 (hereinafter termed "the said Act"), it is enacted that if it is found that any land held, taken, purchased, or acquired at any time under this or any other Act or Provincial Ordinance, or otherwise howsoever, for any public work, is not required for such public work, the Governor-General may, by Order in Council publicly notified and gazetted, cause the same to be sold under the conditions set forth in the said Act:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers and authorities conferred upon him by the said Act, and acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby order and direct the sale of the said land described in the Schedule hereto.

SCHEDULE.

APPROXIMATE area of the piece of land: 2 roods 30 perches. Being Lot 4, Railway land (part R.S. 15467), Block VI, Mairaki Survey District, Oxford County. (S.O. 2305, red.)

In the Canterbury Land District; as the same is more particularly delineated on the plan marked L.O. 2427, deposited in the office of the Government Railways Board at Wellington, and thereon coloured blue.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
L.O. 15058.)

*Domain Board appointed to have Control of the Hatuma Domain.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by section forty-four of the Public Reserves, Domains, and National Parks Act, 1928, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with

the advice and consent of the Executive Council of the said Dominion, doth hereby appoint

Allan John Wilson,  
Morice Harry Collins,  
James Alexander Grant,  
John Hobson,  
William Wright, and  
Henry Thomas Wright

to be the Hatuma Domain Board, having control of the land described in the Schedule hereto; and doth hereby appoint Tuesday, the second day of July, one thousand nine hundred and thirty-five, at eight o'clock p.m., as the time when, and the Domain Hall, Hatuma, as the place where, the first meeting of the Board shall be held.

SCHEDULE.

HAWKE'S BAY LAND DISTRICT.—HATUMA DOMAIN.

SECTION 29, Block I, Motuotaria Survey District: Area, 14 acres 0 roods 2 perches.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
(L. and S. 1/792.)

*Domain Board appointed to have Control of the Waikaka Domain.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by section forty-four of the Public Reserves, Domains, and National Parks Act, 1928, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby appoint

Leslie Turnbull,  
Frank Browning,  
James Ross,  
Robert Hill Gardyne,  
Fred Gutschlag,  
Thomas Keating,  
Samuel Black,  
Thomas McDonald, and  
Francis Corcoran

to be the Waikaka Domain Board, having control of the land described in the Schedule hereto; and doth hereby appoint Monday, the fifteenth day of July, one thousand nine hundred and thirty-five, at eight o'clock p.m., as the time when, and the office of Messrs. J. E. Watson and Co., Ltd., Waikaka, as the place where, the first meeting of the Board shall be held.

SCHEDULE.

SOUTHLAND LAND DISTRICT.—WAIKAKA DOMAIN.

SECTION 84, Block XIV, Chatton Survey District: Area, 10 acres, more or less.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
(L. and S. 1/208.)

*Domain Board appointed to have Control of the Poukiore Domain.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by section forty-four of the Public Reserves, Domains, and National Parks Act, 1928, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby appoint

Douglas Johnston Coleman,  
Robert Gardner Dalziel,  
Andrew William Coleman,  
Stewart Robinson McAlley, and  
Fred Shackleton

to be the Poukiore Domain Board, having control of the land described in the Schedule hereto; and doth hereby appoint Wednesday, the seventh day of August, one thousand nine

hundred and thirty-five, at half past seven o'clock p.m., as the time when, and the Poukiore Hall as the place where, the first meeting of the Board shall be held.

SCHEDULE.

WELLINGTON LAND DISTRICT.—POUKIORE DOMAIN.

SECTION 35, Block XV, Tiriraukawa Survey District: Area, 17 acres 3 roods 8 perches.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(L. and S. 1/352.)

*Making Additional Regulations under Part I of the Fisheries Act, 1908.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance of the powers and authorities conferred by the fifth section of the Fisheries Act, 1908, and of all other powers and authorities in that behalf enabling, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby make the following additional regulations, and doth hereby order and declare that they shall come into force on the date of publication thereof in the *Gazette*.

REGULATIONS.

(1) No person shall use any net for taking indigenous fish in any part of the Kakanui River or inside its mouth: Provided that this regulation shall not apply to persons using a landing-net in fishing with rod and line or using a whitebait-net or using a set-net for taking mullet.

(2) No person shall use a set-net for taking mullet in the Kakanui River above a line drawn in an easterly direction across the river from the left bank of the backwater which enters the main channel on its right bank at the junction of the backwater aforesaid approximately 135 yards below the Kakanui Bridge, and marked by posts painted white fixed on either bank.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

*Licensee the Benara Timber Company, Limited, to use and occupy a Part of the Foreshore and Land below Low-water Mark at Westhaven Inlet as a Site for a Wharf and Tramline, and prescribing Dues for the use of the said Wharf.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

PURSUANT to the Harbours Act, 1923, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, doth hereby license and permit the Benara Timber Company, Limited, of Nelson (hereinafter called "the company," which term shall include its successors and assigns unless the context requires a different construction), to use and occupy all that part of the foreshore and land below low-water mark at Westhaven Inlet, shown on plan marked M.D. 7356, and deposited in the office of the Marine Department at Wellington, for the purpose of the use of the wharf and tramline shown on the said plan for a term of fourteen years computed from the first day of July, one thousand nine hundred and thirty-five, such license to be held and enjoyed by the company upon and subject to the terms and conditions set forth in the First Schedule hereto, and doth hereby prescribe that the dues and rates set forth in the Second Schedule hereto shall be charged and taken by the company for the use of the said wharf.

FIRST SCHEDULE.

1. In these conditions the terms—

"Foreshore" means such parts of the bed, shore, or banks of a tidal water as are covered and uncovered by the flow and ebb of the tide at ordinary spring tides:

"Low-water mark" means low-water mark at ordinary spring tides:

"Minister" means the Minister of Marine as defined by the Shipping and Seamen Act, 1908, and includes any officer, person, or authority acting by or under the direction of such Minister.

2. The concessions and privileges conferred by this Order in Council shall extend and apply only to the part of the foreshore and land below low-water mark adjacent thereto necessary for the maintenance of the said wharf and tramline at the site shown on plan marked M.D. 7356.

3. In consideration of the concessions and privileges granted by this Order in Council the company shall pay to the Minister the sum of £2 10s., and thereafter an annual sum of £5, in advance, payable on the 1st day of April in each year, the proportionate part of such rental in respect of the period from the 1st day of July, 1935, until the 31st March following to be paid on the company being supplied with a copy of this Order in Council.

4. All persons shall, at all reasonable times, upon payment of the proper dues, have free and full liberty to use the said wharf and tramline and all rights of ingress and egress thereon and therefrom.

5. His Majesty or the Governor-General, and all officers in the Government service acting in the execution of their duty, shall at all times have free ingress, passage, and egress into, through, and out of the said wharf and tramline without payment.

6. The company shall maintain the above-mentioned wharf and tramline in good order and repair, and shall at all times exhibit from the wharf and maintain at the company's own cost suitable and necessary lights for the guidance of vessels: Provided that no light shall be exhibited until after it has been approved of by the Minister.

7. Any person authorized by the Minister may, at all reasonable times, enter upon the said wharf and tramline and view the state of repair thereof, and upon such Minister leaving at or posting to the last known registered office of the company in New Zealand a notice in writing of any defect or want of repair in such wharf and tramline, requiring the company within a reasonable time, to be therein prescribed, to repair the same, the company shall with all convenient speed cause such defect to be removed or such repairs to be made.

8. Nothing herein contained shall authorize the company to do or cause to be done anything repugnant to or inconsistent with any law relating to the Customs or any regulation of the Minister of Customs, or with any provisions of the Harbours Act, 1923, or its amendments, or any regulations made thereunder, and that are now or may hereafter be in force.

9. The master of each vessel discharging ballast at the said wharf shall have all such ballast taken away and deposited above high-water mark or at such place as may be approved of by the Minister, or by any person appointed by the Minister for that purpose.

10. The rights, powers, and privileges conferred by or under this Order in Council shall continue in force for fourteen years from the 1st day of July, 1935, unless in the meantime such rights, powers, and privileges shall be altered, modified, or revoked by competent authority; and the company shall not assign, charge, or part with any such right, power, or privilege without the previous written consent of the Minister first obtained.

11. The said rights, powers, and privileges conferred under or by virtue of this Order in Council may be at any time resumed by the Governor-General without payment of any compensation whatever, on giving to the company three calendar months' previous notice in writing. Any such notice shall be sufficient if given by the Minister and delivered at or posted to the last known registered office of the company in New Zealand.

12. The company shall be liable for any injury which the said wharf and tramline may cause any vessel or boat to sustain through any default or neglect on the company's part.

13. In case the company shall—

- (1) Commit or suffer a breach of the conditions hereinbefore set forth, or any of them;
- (2) Cease to use or occupy the said wharf and tramline for a period of thirty consecutive days;
- (3) Be in any manner wound up or dissolved; or
- (4) Fail to pay the sums specified in clause 3 of these conditions—

then, and in any of the said cases, this Order in Council and every right, power, or privilege may be revoked and determined by the Governor-General in Council without any notice to the company or other proceedings whatsoever; and publication in the *Gazette* of an Order in Council containing such revocation shall be sufficient notice to the company and to all persons concerned or interested that this Order in Council and the license, rights, and privileges thereby granted and conferred have been revoked and determined.

14. In the event of this Order in Council being revoked for any reason whatsoever, or upon the expiry of the period for which the license is granted, the company shall, if required by the Minister so to do, remove the said wharf and tramline entirely from the site and restore the site to its original condition within three months from the date of the revocation or expiry, as the case may be; and if the company fails so to do, the Minister may cause the said wharf and tramline to be removed and the site so restored, and may recover from the company the costs incurred by the said removal and restoration.

15. The erection of the wharf and tramline shall be sufficient evidence of the acceptance by the company of the terms and conditions of this Order in Council.

SECOND SCHEDULE.

RATES, EXCLUDING LABOUR.

On all goods not otherwise specified at per ton (weight or measurement)	s.	d.
Minimum charge	0	3
Benzine, kerosene, fuel oil, lubricating and other lines, per drum	1	0
Benzine, kerosene, fuel oil, lubricating and other lines, per case	0	3
Bicycles, each	0	3
Bricks and slates, per thousand	5	0
Bricks and slates, minimum charge	1	0
Cattle and horses, per head, first 20	2	0
Cattle and horses, each additional, per head	1	0
Chaff, per ton	1	0
Coal, per ton	0	6
Firewood, per cord	1	0
Hides, each	0	3
Lime, stone, and manure, per ton	1	0
Machinery and plant, per ton	2	0
Passengers' luggage, not exceeding 100 lb.	Free.	
Posts and rails, per 100	1	0
Sand and gravel, per yard	0	6
Sheep, pigs, calves, and goats, per head, first 50	0	3
Sheep, pigs, calves, and goats, each additional, per head	0	1
Sheep-skins, per bale not exceeding 2 cwt.	0	6
Sheep-skins, loose, each	0	1
Timber, per 100 superficial feet	0	6
Vehicles, four-wheel, each	5	0
Vehicles, two-wheel, each	2	6
Wool, hops, flax, per bale	0	9

The company shall not be compelled to supply labour or to store any goods.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

Order in Council varying the Determinations in respect of the Whangaroa Hospital Board's Loan of £400 by prescribing Repayment on the Instalment-repayment System.

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by Order in Council made on the twenty-ninth day of November, one thousand nine hundred and thirty-four, and subject to the determinations as to borrowing and repayment therein set out, consent was given to the raising by the Whangaroa Hospital Board (hereinafter called "the said local authority"), of the sum of four hundred pounds (£400) by a loan to be known as "Redemption Loan (No. 2), 1934" (hereinafter called "the said loan"):

And whereas the said loan has not yet been raised, and it is expedient to vary the determinations aforesaid in respect thereof:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred on him by section eleven of the Local Government Loans Board Act, 1926, as set out in section twenty-nine of the Finance Act, 1932 (No. 2), and of all other powers and authorities enabling him in this behalf, doth hereby vary certain of the determinations aforesaid by prescribing that in lieu of making repayment of the said loan by annual instalments of principal the said local authority may raise the said loan upon terms of making the same, together with interest thereon, repayable by equal aggregate annual instalments extending over a period of four (4) years.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
(T. 40/621.)

Order in Council validating Proceedings in connection with the Kahutara Stop-bank Loan of £14,000.

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS the Kahutara River Board, pursuant to the provisions of the Local Bodies' Loans Act, 1913, and the Rating Act, 1908, in the year 1922 proceeded to raise a loan of fourteen thousand pounds (£14,000) for the purpose of erecting stop-banks for river protection, such loan being then described as "The Kahutara Stop-bank Loan of £14,000" and having a currency of twenty years from the first day of November, one thousand nine hundred and twenty-two (hereinafter referred to as "the said loan"):

And whereas under the provisions of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and under the authority of an Order in Council dated the fifteenth day of August, one thousand nine hundred and thirty-four, and known as the "The Kahutara River Board Loans Conversion Order, 1934 (No. 1)," the said loan was converted to a loan of £14,500 and described as "The Kahutara River Board Conversion Loan, 1934 (No. 1)":

And whereas the special rate referred to in the resolution hereinafter set forth enures as security for the said conversion loan:

And whereas as part of the proceedings in connection with the raising of the said loan the said Board did on the thirty-first day of October, one thousand nine hundred and twenty-two, pass a resolution in the terms following:—

"In pursuance and exercise of the powers vested in it in that behalf by the Local Bodies' Loans Act, 1913, and the Rating Act, 1908, and its amendments, the Kahautara River Board resolves as follows:—

"That for the purpose of providing the instalments in respect to interest and principal and also other charges on a loan of £14,000 authorized to be raised by the Kahautara River Board under the Local Bodies' Loans Act, 1913, and the Rating Act, 1908, and amendments thereto, for the purpose of erecting stop-banks for river protection, the Kahautara River Board hereby makes and levies a special rate of two and three-eighths (2 $\frac{3}{8}$ ) of a penny in the pound sterling on the rateable value (on the basis of the unimproved value) of all rateable properties within the Kahautara River District, and that such special rate shall be an annual-recurring rate during the currency of such loan, being a period of twenty (20) years or until the loan is fully paid off":

And whereas the proceedings in connection with the said loan were irregular or defective in that in the said resolution the said Board was incorrectly described as "the Kahautara River Board" and the district as "the Kahautara River District," and in that in such resolution no date was fixed in each year on which the special rate mentioned therein should be payable:

And whereas it was intended that the said rate should be payable yearly on the first day of April in each and every year during the currency of the said loan, being a period of twenty years or until the loan should be fully paid off:

And whereas it appears that the ratepayers have not been misled by such irregularities or defects and that it is expedient to validate the same:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers and authorities conferred on him by section one hundred and twenty-two of the Local Bodies' Loans Act, 1926, and of all other powers and authorities enabling him in this behalf, and acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby order and declare that the proceedings in connection with the said loan shall be valid to all intents and purposes as though the River Board and River District referred to in the said resolution had been correctly designated as the Kahutara River Board and the Kahutara River District respectively, and as though the words "and be payable yearly on the first day of April in each and every year" had been expressed in the said resolution immediately following the words "annual-recurring rate" appearing in the said resolution, and that the validity of the proceedings in connection with the said loan shall not be called in question only by reason of the irregularities or defects aforesaid.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.  
(T. 49/428.)



*Order in Council consenting to the Raising of Loans by certain Local Authorities and prescribing the Conditions thereof.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HONOURABLE SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS the several local authorities enumerated in the Schedule hereto, being desirous of raising the respective loans stated opposite their names therein, have respectively complied with the provisions of the Local Government Loans Board Act, 1926 (hereinafter called "the said Act"), and it is expedient that the precedent consent of the Governor-General in Council, as required by the said Act, should be given to the raising of the said loans:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred on him by section eleven of the said Act, as set out in section twenty-nine of the Finance Act, 1932 (No. 2), and of all other powers and authorities enabling him in this behalf, doth hereby consent to the raising by the respective local authorities mentioned in the First Column of the said Schedule of the respective loans set out in the Second Column of the said Schedule, up to the respective amounts specified in the Third Column of the said Schedule, and in giving such consent doth hereby determine as follows:—

(1) The terms for which the said loans or any parts thereof may be raised shall be the respective terms (in years) stated in the Fourth Column of the said Schedule.

(2) The rates of interest that may be paid in respect of the said loans or any parts thereof shall be such as shall not produce to the lender or lenders a rate or rates exceeding the respective rates per centum per annum stated in the Fifth Column of the said Schedule.

(3) The said respective loans or any parts thereof, together with interest thereon, shall be repaid by equal aggregate annual or half-yearly instalments extending over the respective terms as determined in (1) above.

(4) The payment of such instalments shall be made in New Zealand, and no such instalment shall be paid out of loan-moneys.

(5) The rate payable for brokerage, underwriting, and procuration fees in respect of the raising of the said respective loans or any parts thereof shall not in the aggregate exceed one-half per centum of any amount raised.

(6) No moneys shall be borrowed under this consent after the expiration of two years from the date hereof.

SCHEDULE.

<i>First Column.</i> Name of Local Authority.	<i>Second Column.</i> Name of Loan.	<i>Third Column.</i> Amount of Loan.	<i>Fourth Column.</i> Term of Loan (Years).	<i>Fifth Column.</i> Rate of Interest.
1. Kaiapoi Borough Council .. ..	Housing Loan (No. 2A), 1935 .. ..	£ 3,500	30	£ s. d. 3 10 0
2. Manukau County Council .. ..	Papakura Riding Bridge Loan, 1935 .. ..	1,000	20	3 10 0
3. Auckland and Suburban Drainage Board	No. 12 Loan, 1935 .. ..	30,000	26½	3 10 0
4. Geraldine Borough Council .. ..	Masonic Hall Redemption Loan, 1935 .. ..	140	4	3 10 0

(T. 40/416/6.)

A. W. MULLIGAN, Acting Clerk of the Executive Council.

*Order in Council consenting to the Raising of a Loan of £15,000 by the Matamata County Council and prescribing the Conditions thereof.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by Order in Council made on the eighth day of June, one thousand nine hundred and twenty-five, and published in the *Gazette* of the eleventh idem, at page 1876, consent was given to the raising by the Matamata County Council (hereinafter called "the said local authority") of a loan of £201,000 comprising amounts of £160,000 and £41,000, and the authority so conferred has not been exercised in respect of the £160,000 portion to the extent of £50,000:

And whereas by section nine of the Local Authorities Interest Reduction and Loans Conversion Amendment Act, 1934, the consent given by the said Order in Council was revoked in so far as the authority conferred thereby had not been exercised, and it is not now lawful or competent for the said local authority to borrow any moneys to which such consent relates except in accordance with the provisions of an Order in Council under section eleven of the Local Government Loans Board Act, 1926:

And whereas it is expedient to authorize the said local authority to borrow on the conditions hereinafter mentioned the sum of fifteen thousand pounds (£15,000) (hereinafter called "the said sum"), being part of the moneys to which the said consent relates:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred on him by section eleven of the Local Government Loans Board Act, 1926, and by section nine of the Local Authorities Interest Reduction and Loans Conversion Amendment Act, 1934, and of all other powers and authorities enabling him in this behalf, doth hereby consent to the borrowing by the said local authority of the said sum for the purpose for which the £160,000 portion of the aforesaid loan was authorized, and in giving such consent doth hereby determine as follows:—

(1) The said sum may be raised in separate portions, one of seven thousand pounds (£7,000) and one of eight thousand pounds (£8,000), upon terms of making the same, together with interest thereon at a rate that shall be such as shall not produce to the lenders a rate exceeding three pounds ten shillings (£3 10s.) per centum per annum, repayable respectively by equal aggregate half-yearly instalments of principal and interest, extending over a period of thirty (30) years in respect of the £7,000 portion and fifteen (15) years in respect of the £8,000 portion.

(2) The payment of such instalments shall be made in New Zealand, and no such instalment shall be paid out of loan-moneys.

(3) The rate payable for brokerage, underwriting, and procuration fees in respect of the raising of the said sum or any part thereof shall not in the aggregate exceed one-half per centum of any amount raised.

(4) No moneys shall be borrowed under this consent after the expiration of two years from the date hereof.

A. W. MULLIGAN,

Acting Clerk of the Executive Council.

(T. 49/129.)



*The General Harbour (Safe-working Load) Regulations, 1935.*

GALWAY, Governor-General.

## ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present :

THE HONOURABLE SIR ALFRED RANSOM PRESIDING IN COUNCIL.

**I**N pursuance and exercise of the power and authority conferred upon him by section 234 of the Harbours Act, 1923, and of all other powers and authorities enabling him in that behalf, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, doth hereby make the following regulations.

## REGULATIONS.

## PART I.—PRELIMINARY.

## Short Title.

1. THESE regulations may be cited as the General Harbour (Safe-working Load) Regulations, 1935.

## Commencement.

2. These regulations shall come into force on the 1st day of July, 1935.

## Definitions.

3. In these regulations, where the context so requires or admits,—

“Cargo gear” includes chains, chain-attachments, wire ropes and fibre ropes, derricks, blocks and permanent attachments, including guypennants and attachments thereto used in working cargo.

“Derrick” includes derricks, derrick fittings, and permanent attachments used in working cargo :

“Chain attachments” includes rings, long links, wide links, shackles, swivels, hooks, and similar metallic articles whether actually attached to any other cargo gear or not and whether used or intended for use with chains or with ropes or with other cargo gear :

“Long link” means a link the outside length of which exceeds four and a half times the diameter of the iron :

“Enlarged link” means a link the outside width of which exceeds three and a quarter times the diameter of the iron :

“Short-link chain” means a chain the outside measurement of the links of which (other than end links) does not exceed in width three and a quarter times the diameter of the iron ; or in length four and a half times the diameter of the iron :

“Block” includes in addition to the body, sheaves, and pin, any shackle, eye, hook, becket, or other thing forming a permanent attachment of a block ; but does not include a block having wooden parts :

“B.S. Specification No. 394, 1930,” means the publication of the British Engineering Standards Association known as the British Standard Specification for Short Link Wrought Iron Crane Chain and marked 394-1930, and includes all amendments thereto issued prior to the date hereof :

“Circumference” of a wire rope means the circumference as determined from the average of measurements of diameter measured with a suitable device at three places at least 5 ft. apart, see Diagram No. 8 :

The phrase “working cargo” means working cargo on board any ship :

“Ship” has the meaning assigned to it by the Harbours Act, 1923—namely, every description of vessel, whether used in navigation or in any way kept or used as a hulk or store-ship, or for any other purpose, and not propelled exclusively by oars.

## Diagrams.

4. The diagrams appended hereto may be referred to for interpretation of any of the provisions hereinafter contained.

## Revocation.

5. The General Harbour Regulations made by Order in Council on the 17th day of May, 1927, and published in the *Gazette* on the 19th day of the same month, at page 1475, shall be revoked upon the coming into force of these regulations.

## PART II.—EXEMPTION.

## Persons not relieved from Responsibility.

6. No maker of or dealer in cargo gear and no shipowner or other person shall by reason of these regulations or of anything done hereunder be relieved from any responsibility in respect of any cargo gear made, sold, or used by him to which but for these regulations he would have been subject.

## Gear in use before 17th May, 1927.

7. Except as hereinafter mentioned the requirements of these regulations relating to the testing of chains and ropes shall not apply to chain or rope which has been used for working cargo before the 17th day of May, 1927 :

Provided that the provisions of Part X hereof, and Regulations 63, 64, 69, and 70 hereof, shall apply to such chain and rope respectively in all respects.

## Gear in use before Commencement.

8. Except as hereinafter mentioned the requirements of these regulations relating to the testing of chains and ropes shall not apply to chain or rope which before the coming into force of these regulations is in stock in any place in New Zealand or in use for working cargo if such chain or rope has already been tested in accordance with the requirements of the regulations hereby revoked :

Provided that the provisions of Part X hereof, and Regulations 63, 64, 69, and 70 hereof, shall apply to such chain or rope respectively in all respects.

## Gear complying with Overseas Regulations.

9. The cargo gear of a ship which has been inspected under and complies with the provisions of the Docks Regulations of the United Kingdom, or with the regulations of any country the Government of which has enacted regulations for cargo gear substantially equivalent to these regulations shall be deemed to comply with the requirements of these regulations :

Provided that nothing in this regulation shall exempt any person using such cargo gear from compliance with the regulations contained in Part V hereof.

## Gear of other Overseas Ships.

10. The cargo gear of a ship not provided for by the last preceding regulation shall on the occasion of the first visit of the ship to New Zealand be deemed to comply with the requirements of these regulations upon the following conditions :—

- (a) All cargo gear thereof shall have been closely examined by responsible ship's officers within the six months immediately preceding the arrival of the ship in New Zealand :
- (b) A statement shall be drawn up by the ship's officers who made the inspection, and signed by the master specifying the gear inspected and date or respective dates of inspection and declaring that the cargo gear is in good condition and that the respective parts thereof are fit for the working of any cargo for which such parts may reasonably be required :
- (c) The said statement shall be available for inspection and endorsement by any Surveyor of Ships or Inspector of Gear at any port at which such ship loads or unloads cargo :

Provided that nothing in this regulation shall exempt any person using such cargo gear from compliance with the regulations contained in Part V hereof :

Provided also that nothing in this regulation shall apply so as to exempt from full compliance with these regulations the cargo gear of any ship on the occasion of the second or any subsequent visit of the ship to New Zealand.

Ships subject to Survey not exempted.

11. Nothing in the two last preceding regulations shall apply to or create an exemption for the cargo gear of any ship subject to survey in New Zealand under the Shipping and Seamen Act, 1908.

Gear of Special Character.

12. In the case of any cargo gear which by reason of special materials, design, or manufacture, or otherwise does not comply with the requirements of these regulations the Chief Surveyor of Ships may, by writing under his hand, grant permission for the sale and use of such cargo gear subject nevertheless to such restrictions and conditions as to manner, purpose, place, or period of sale, or use or other matter, as in such permission the Chief Surveyor of Ships thinks it proper to impose; and so long as such conditions are complied with such permission shall as far as it extends and subject to any restrictions thereby imposed be a defence to any person charged with a breach of these regulations in respect of the cargo gear to which such permission relates.

Substituted Test.

13. In any case in which a test of cargo gear is prescribed by these regulations the Chief Surveyor of Ships may approve an alternative test or method of testing which in his opinion is equivalent or superior to a test hereby prescribed, and may permit the terms of any test certificate hereby prescribed to be modified accordingly and any cargo gear that has withstood such alternative test shall be deemed to comply with these regulations in respect of testing and any test certificate so modified shall be sufficient for the purposes of these regulations.

### PART III.—SALE AND PURCHASE OF CARGO GEAR.

Sale of Untested Gear.

14. No maker of or dealer in cargo gear shall sell or contract to sell and no person shall purchase or contract to purchase any cargo gear for working cargo unless such cargo gear complies with the requirements of these regulations (including requirements relating to testing).

Sale to be subjected to Warranty.

15. Every contract for the sale of cargo gear for working cargo shall in the absence of an express stipulation to the contrary be deemed to imply a warranty that such cargo gear complies with the requirements of these regulations (including requirements relating to testing). The burden of proving (a) the existence of any such express stipulation and (b) compliance with the requirements of these regulations shall in case of dispute lie on the seller.

Vendor to supply Test Certificate.

16. No person shall sell or purchase or otherwise acquire any cargo gear in connection with which a test certificate is prescribed by these regulations unless upon such sale, purchase, or other acquisition there is delivered to the person purchasing or acquiring such cargo gear the appropriate test certificate (if any) herein prescribed:

Provided that (a) where a length of 100 fathoms of chain, or (b) any tested wire rope has been cut into shorter lengths for sale, or (c) where a single test certificate has been obtained for a number of chain attachments or blocks being of an identical size and tested at the one time it shall be sufficient compliance with these regulations if there is so delivered by the vendor a copy of the original test certificate accompanied by a declaration that it is a true copy thereof:

Provided also that every vendor so delivering a copy of an original test certificate shall retain the original test certificate for a period of five years from the date of delivery, and shall at all times during that period permit any Surveyor of Ships or Inspector of Gear to inspect the same.

Guarantee of Fibre Ropes.

17. Subject to Regulation 71 hereof, no person shall sell or purchase or otherwise acquire any fibre rope to be used for working cargo unless upon such sale, purchase, or other acquisition there is delivered to the person purchasing or acquiring such fibre rope a written guarantee as to the quality or brand and the breaking load.

### PART IV.—METHOD OF USING CARGO GEAR.

Gear to comply with Regulations.

18. No owner or master of any ship or other person responsible for working cargo shall use or cause or permit to be used for working cargo any cargo gear that does not comply with the requirements of these regulations.

## Gear used contrary to Regulations.

19. No owner or master of any ship or other person responsible for working cargo shall in working cargo use or cause or permit to be used any cargo gear in a manner contrary to any provision in these regulations.

## PART V.—PARTICULAR RESTRICTIONS IN WORKING.

## Observance of Safe-working Load.

20. In particular no owner or master of any ship nor any owner of cargo gear nor any person who by himself, his agents, or workmen whether as master or servant is engaged in working cargo shall in working cargo put or cause or permit to be put on any cargo gear a load greater than the respective safe working load prescribed by or under these regulations.

## Use of Chain Attachments.

21. No owner or master of any ship or owner of cargo gear or other person responsible for working cargo shall use or cause or permit to be used any chain attachment attached to a chain or rope unless the safe-working load thereof as determined by or under these regulations is at least equal to the safe-working load of such chain or rope.

## Use of Chain Attachments with more than one Chain or Rope.

22. No owner or master of any ship or owner of cargo gear or other person responsible for working cargo shall use or cause or permit to be used a chain attachment attached to more than one chain or rope unless the safe-working load of the chain attachment is at least equal to the permissible safe-working load of all the combined chains and/or ropes to which the chain attachment is attached.

## Burton Block prohibited for Coal-working.

23. No owner or master of a ship nor any person who by himself, his agents, or workmen is engaged, whether as master or servant, in working coal cargo shall use a Burton block for the loading or unloading of coal on, to, or from any ship.

## Cargo Gear to be tested.

24. In particular no owner or master of a ship nor any owner of cargo gear or other person responsible for working cargo shall use or cause or permit to be used for working cargo any cargo gear which has not been tested as required by these regulations.

## Shackling together of two Ship's Gear.

25. No owner or master of any ship or other person responsible for working cargo shall shackle the cargo gear of one ship to the cargo gear of any other ship or cause or permit the cargo gear of any ship to be shackled to the cargo gear of any other ship :

Provided that this regulation shall not apply to the cargo gear of a coal hulk.

## PART VI.—CARGO-GEAR REGISTERS.

## Form of Register.

26. Every owner or master of a ship and every owner of cargo gear (including chain slings) shall keep a register of such cargo gear either in volume form or by a system of filing cards or other suitable records.

## Place for keeping Register.

27. Such register shall be permanently kept on the ship or other premises where such cargo gear is stored when not in use, or in some other place approved in writing for the purpose by the Chief Surveyor of Ships.

## Contents of Register.

28. Such register shall in respect of every piece of cargo gear belonging to the owner set out in suitable form the following particulars :—

- (1) Description and means of identification.
- (2) Whether used for heavy lifts or as ordinary gear.
- (3) Date of test load.
- (4) Number and date of test certificate.
- (5) Date of last annealing and repair.
- (6) Date of retest after last repair.
- (7) Amount of test load applied on retest after repair.
- (8) Signature of Surveyor of Ships or Inspector of Gear and date when he last examined and passed the cargo gear.

## Entry of Particulars.

29. The said particulars shall be entered immediately after any event that requires the making of an entry.

## Inspection of Register.

30. The owner shall permit any Surveyor of Ships or Inspector of Gear at all reasonable times to inspect the register and make copies of any entries therein.

## PART VII.—CHAINS.

## Specifications for Short-link Chains.

31. All short-link chains for use as cargo gear shall comply with the following requirements :—

- (a) The whole of the iron used in the manufacture of the chain shall be of the description known as "puddled wrought iron." In no case shall steel be used as an admixture. The bars shall be free from surface defects. The iron shall not contain more manganese than 0.1 per centum determined by analysis of drillings taken from the finished chain.
- (b) The diameter of the iron bar used for making the links shall be not less than the respective diameter set out in the First Column of Table No. 1 in the Second Schedule hereto, and shall not exceed it by more than  $\frac{1}{8}$ .
- (c) The outside dimensions of the common links shall be as follows :  
In length not more than four and a half times and in width not more than three and a quarter times the diameter of the iron bar used for making the common links.
- (d) The average weight per fathom of the finished chain shall be not more than 5 per centum over or  $2\frac{1}{2}$  per centum under the respective weight set out in the Second Column of the said Table No. 1.
- (e) The chain shall be of the highest grade of hand-welded workmanship. The welds shall be carefully tooled, and shall be so proportioned as to allow free movement between the links, but shall in no case be less than the nominal diameter of the chain.
- (f) A test sample of a clear length of 36 in. from each 100 fathoms of chain or part of 100 fathoms shall be subjected to the proof load set out in the third column of the said Table No. 1, and the sample shall afterwards be subjected to the test load set out in the fourth column of said Table No. 1, and shall have an elongation per 36 in. of chain upon application of the test load, exclusive of elongation produced by the proof load, of at least the respective elongation set out in the Fifth Column of the said Table No. 1. A test sample consisting of five links adjacent to the aforementioned sample and having the central link nicked at the centre on the face of one side and on the reverse face of the other side to a depth of one-quarter of the diameter shall be tested to destruction by a tensile load, and the fractures shall show a clean silky fibre throughout, free from dirt, localized concentrations of slag, or any coarse crystalline spots or streaks. One of the half links cut through the crowns in removing the aforementioned samples shall be subjected to a cold bend test and one shall be subjected to a hot bend test in each case without showing signs of fracture on the outsides of the bent portions.

The whole length of a chain shall withstand the respective proof load set out in the Third Column of the said Table No. 1 without any link showing flaws, cracks, fractures, or other defects.

## Testing of Chain.

32. The testing referred to in the last preceding regulation shall comply with the following requirements :—

- (a) The test shall be conducted in the manner prescribed in B.S. Specification No. 394/1930 and with a testing-machine of a type conforming to the requirements therein prescribed.
- (b) An identification mark shall be stamped on all end links of a chain from which test samples are taken.
- (c) A test certificate in the form No. 1 set out in the First Schedule hereto and complying with the requirements hereinafter contained shall be supplied in respect of every chain.
- (d) Every test certificate shall be signed by a person witnessing the tests, who shall be an independent authority such as the responsible testing officer of a licensed proving house or a Board of Trade Surveyor or a Surveyor of an approved classification society or other duly qualified testing officer.

- (e) Every test certificate shall contain a statement on the part of the manufacturer or other responsible person that the chain therein referred to conforms in all respects to B.S. Specification No. 394/1930.
- (f) Every test certificate shall also show—
- (1) The identification mark of the chain to which the certificate refers :
  - (2) The nominal size of the chain :
  - (3) The leading dimensions of any chain attachments permanently attached to the chain and subjected to the same proof load as the chain :
  - (4) The proof load applied :
  - (5) The test load specified for a 36 in. sample :
  - (6) The elongation at the specified test load :
  - (7) The ultimate breaking load of a 36 in. sample :
  - (8) The ultimate elongation :
  - (9) The result of the nicked tensile test and cold and hot bend test on sample links cut from chain :
  - (10) The proof load applied to the "length."
  - (11) The actual length of the chain to which the certificate refers :
  - (12) The name and address of the testing establishment :
  - (13) The date of the test :
  - (14) A statement by the person witnessing the test that the chain has been carefully examined after test and contains no faulty links :
  - (15) The signature of the person witnessing the test.

Chain other than Short-link Chain.

33. In the case of a chain other than a short-link chain, the requirements of Regulations 31 and 32 hereof shall apply with necessary modifications, and any test certificate for such chain shall be deemed sufficient if endorsed with an approval in writing signed by a Surveyor of Ships or Inspector of Gear.

PART VIII.—CHAIN ATTACHMENTS.

Rings.

34. All rings for use as cargo gear shall comply with the following requirements:—

- (a) The material and workmanship of the ring shall comply with the requirements set out in paragraphs (a) and (b) of Regulation 31 hereof.
- (b) The ring shall be tested as prescribed in Part IX hereof.

Long Links and Enlarged Links.

35. All end links for use as cargo gear of greater dimensions than the common links of the chain to which they belong (and including long links and enlarged links) shall comply with the following requirements:—

- (a) The material and workmanship of the link shall comply with the requirements set out in paragraphs (a) and (b) of Regulation 31 hereof.
- (b) The link shall be tested as prescribed in Part IX hereof.

Shackles.

36. All shackles for use as cargo gear shall comply with the following requirements:—

- (a) The iron material of the shackle shall comply with the requirements set out in paragraphs (a) and (b) of Regulation 31 hereof.
- (b) The pin of the shackle may be of steel if the steel is a selected mild steel of suitable strength and ductility.
- (c) The pin shall be screwed in or otherwise properly secured.
- (d) The shackle shall be tested as prescribed in Part IX hereof.

Swivels.

37. All swivels for use as cargo gear shall comply with the following requirements:—

- (a) The swivel shall be proportioned as follows, the diameter of the iron in the common link being regarded as unity:—
  - (i) The diameter of the iron in the eye of the swivel must be at least  $1\frac{1}{4}$ .
  - (ii) The diameter of the iron in the pin (measured at the bottom of the thread) must be at least  $1\frac{1}{8}$ .
  - (iii) The diameter of the iron in the crown of the bow-piece must be at least  $1\frac{1}{2}$ .
  - (iv) The depth of the bow-piece where bearing on the swivel-nut must be at least  $1\frac{1}{2}$ .

- (b) The depth of the nut of the swivel pin must be at least  $1\frac{1}{2}$ .
- (c) The swivel-pin should be screwed to British Whitworth Standard dimensions and have the end riveted over or secured by welding it to the end of the pin.
- (d) Nevertheless swivels held in stock by any shipowner at the coming into force of these regulations may be used up if before being placed in use they are approved by an Inspector of Cargo Gear or Surveyor of Ships.
- (e) The swivel shall be tested as prescribed in Part IX hereof.

#### Hooks.

38. All hooks for use as cargo gear shall comply with the following requirements:—

- (a) The hook shall be made of selected wrought iron or selected mild steel of suitable tensile strength and ductility.
- (b) The hook shall be drawn out of the solid and shall be carefully annealed after forging.
- (c) The hook shall be tested as prescribed in Part IX hereof.

#### PART IX.—TESTING OF CHAIN ATTACHMENTS.

##### Where attached to Chain.

39. Every chain attachment attached to a chain shall be tested to withstand the same proof load as the chain to which it is attached.

##### Where not attached to Chain.

40. Every chain attachment not attached to a chain shall be tested to withstand a load of double the maximum working load prescribed by these regulations.

##### Identification Mark.

41. An identification mark or number shall be stamped upon every chain attachment the subject of a test.

##### Defects under Test.

42. Every chain attachment must show no sign of appreciable permanent deformation under test, nor any flaw crack fracture or other defect.

##### Test Certificate required.

43. A test certificate shall be supplied in respect of every chain attachment not attached to a chain, and every chain attachment attached to chain which is not included in the test certificate referred to in clause (f) of Regulation 32: Provided that when chain attachments not attached to chain are of identical design, material, and dimensions, and are tested together in one group, one test certificate for the total number of attachments so tested shall be deemed to be sufficient.

##### Testing Officer to sign Certificate.

44. Every test certificate shall be signed by a person witnessing the test, and the requirements of paragraph (d) of Regulation 32 hereof shall apply.

##### Contents of Test Certificate.

45. Every test certificate shall show—(1) The name and address of the testing establishment; (2) date of test; (3) the tensile load; (4) the identifying mark or number stamped on the chain attachment; (5) description or main dimensions of the chain attachment; (6) number of chain attachments to which the certificate refers; (7) tensile strength, elongation, and grade of material; (8) the amount of permanent deformation (if any) of chain attachment under test.

##### Tests witnessed by Surveyor of Ships or Inspector of Gear.

46. Notwithstanding anything hereinbefore contained, a test certificate given under the hand of a Surveyor of Ships or Inspector of Gear in respect of any chain attachment and in a form approved by the Chief Surveyor of Ships shall be deemed to be the equivalent of the certificate of test mentioned in Regulations 43, 44, and 45.

#### PART X.—CHAINS AND CHAIN ATTACHMENTS IN USE.

##### Annealing of Large Chain.

47. Chains and chain attachments which have at any time been put into use shall not be used for working cargo unless within a period of twelve months immediately before any occasion of use they have been annealed as required by Regulation 51 hereof.



## Annealing of Small Chain.

48. In the case of chains made of iron not exceeding  $\frac{1}{2}$  in. in diameter and chain attachments which are not permitted by these regulations to be attached to a chain of iron exceed  $\frac{1}{2}$  in. in diameter, and which have at any time been put into use, such chain and chain attachments shall not be used for working cargo unless within a period of six months immediately before any occasion of use they have been annealed as required by Regulation 51 hereof.

## Annealing of Special Gear.

49. Nevertheless if in the case of any chain or chain attachments the Chief Surveyor of Ships is of opinion that by reason of the size, design, material, or infrequency of use compliance with the requirements of either of the two last preceding regulations is in the interests of safety unnecessary, he may, by certificate under his hand, exempt such chain or chain attachments from such compliance, subject, however, to such conditions as may be specified in the said certificate.

## Revocation of Annealing Certificate.

50. The Chief Surveyor of Ships may at any time, in his discretion, revoke such certificate by notice in writing given to the person to whom the certificate was given or to any person appearing to be the owner or in immediate control of the gear to which such certificate relates.

## Method of Annealing.

51. All annealing shall be carried out in a thorough and workmanlike manner to the satisfaction of the Chief Surveyor of Ships, and any Surveyor of Ships or Inspector of Gear shall be entitled to be present during the process.

## Permissible Wear of Chain.

52. Chain which has been worn so that the wear of any part exceeds  $\frac{1}{8}$  in. on chains up to  $\frac{1}{2}$  in. diameter,  $\frac{5}{16}$  in. for  $\frac{3}{4}$  in. chain, and  $\frac{1}{4}$  in. for every  $\frac{1}{2}$  in. increase in diameter up to 2 in. shall not be used until the worn parts have been renewed.

## Repaired Chain to be tested.

53. Chains which have been in use and which have been repaired by the adding of new links shall not thereafter be put into use until they have passed a test to the approval of a Surveyor of Ships or Inspector of Gear.

## Tests of Repaired Chain.

54. Such test shall comprise a proof test to a load of at least twice the safe-working load prescribed in Table No. 9 in the Third Schedule hereto, and such other tests as in any particular case the Surveyor of Ships or Inspector of Gear may require.

## Material and Workmanship of Repairs.

55. The Surveyor of Ships or Inspector of Gear may withhold his approval unless he is satisfied as to the quality and suitability of the material used in the repairs and the workmanship thereof.

## Marking.

56. Before being put into use all chains and chain attachments shall be permanently marked with some identifying letter or number not liable to be confused with a number indicating the safe-working load and there shall also be stamped thereon or indicated on a permanent label securely attached thereto the safe-working load thereof as determined by these regulations:

Provided that an identification mark stamped on any chain or chain attachment in connection with the testing thereof may if satisfactory in other respects be accepted as sufficient compliance with the requirements of this regulation:

Provided also that in the case of any chain and/or chain attachments assembled together in a permanent and undetachable manner it shall be sufficient if some one component part thereof be stamped or marked as aforesaid.

## PART XI.—WIRE ROPES AND FIBRE ROPES.

## Test of Black Wire Ropes.

57. A sample of all rope made of black steel wire of special improved patent steel quality (herein referred to as "black wire rope") shall be tested to destruction, and the respective breaking loads shall not be less than the breaking loads set out under the heading "Actual Breaking Load" in Table No. 2 of the Second Schedule hereto.

## Test of Galvanized-wire Ropes.

58. A sample of all galvanized-steel wire ropes shall be tested to destruction, and the respective breaking loads shall not be less than the breaking loads set out under the heading "Actual Breaking Load" in Table No. 3 of the Second Schedule hereto.

## Wrapping Test.

59. All wire ropes shall also be tested to withstand the following test: Six wires or 5 per cent. of the wires in the rope, whichever is greater, shall each be wrapped closely round itself at least eight times and shall then be unwrapped and then straightened; each wire must stand this test without breaking or splitting.

## Test Certificate.

60. A test certificate shall be supplied in respect of every wire rope.

## Testing Officer to sign Certificate.

61. Every test certificate shall be signed by a person witnessing the tests, who shall be the responsible testing officer of a licensed proving house, or a Board of Trade Surveyor, or a surveyor of an approved classification society, or the responsible testing officer of a wire-rope manufacturer who has on his premises a suitable testing-machine, or other duly qualified testing officer.

## Contents of Test Certificate.

62. Every test certificate shall also show—(1) The name and address of the makers; (2) identifying letter or number on the rope; (3) length of rope to which certificate refers; (4) size of rope; (5) number of strands; (6) number of wires in each strand; (7) diameter of the wires; (8) particulars of the heart or core; (9) trade description of the material of which the wires are made; (10) lay of rope; (11) breaking load of sample of rope; (12) result of wrapping test; (13) name and address of testing establishment; (14) date of test; (15) name of person to whom rope has been supplied.

## Inspection of Wire Ropes.

63. Every wire rope in general use for working cargo shall be inspected by a competent person once at least in every three months:

Provided that after any wire has broken in such rope it shall be inspected once at least in every month.

## Broken Wires.

64. No wire rope shall be used for working cargo if in any length of eight diameters the total number of visible broken wires exceeds 10 per centum of the total number of wires or if the rope shows signs of excessive wear, corrosion, or other defect which renders it no longer reasonably fit for its purpose.

## Test of Fibre Ropes.

65. A sample of all fibre ropes of a particular size, quality, and brand shall be tested to destruction in a manner approved by the Chief Surveyor of Ships, and the respective breaking loads shall not be less than the load set out under the heading "Breaking Load" in Table No. 4 or Table No. 5 of the Second Schedule hereto, according to the grade of the rope.

## Test Certificate required.

66. A test certificate shall be supplied in respect of every sample of fibre rope which has been tested.

## Contents of Test Certificate.

67. Every test certificate shall show—(1) The name and address of the makers; (2) identification mark of the rope, or colour of distinguishing thread; (3) fibre and grade of fibre of which rope is made; (4) trade brand

of rope ; (5) size of rope ; (6) number of strands ; (7) number of yarns per strand ; (8) breaking load of sample of rope ; (9) name and address of testing establishment ; (10) signature of person witnessing the test ; (11) date of test.

Guarantees to be approved.

68. No maker of or dealer in fibre ropes shall give the guarantee referred to in Regulation 17 hereof as to quality or brand and breaking load until a certificate of test of a sample of a fibre rope of identical size, quality, and brand has been submitted to the Chief Surveyor of Ships and the guaranteed breaking load has been approved by him.

Retesting.

69. The Chief Surveyor of Ships may at such intervals as he thinks desirable, or at any time when he has reason to doubt the breaking load or quality of a rope, and notwithstanding the existence of any test certificate or guarantee relating thereto by notice in writing delivered to any person appearing to be the owner or in control of any rope, require the rope to be tested anew by some competent and independent authority approved by the Chief Surveyor.

Use of Rope forbidden pending Retesting.

70. After the delivery of such notice as aforesaid no person shall use for working cargo the rope to which the notice relates until it has been subjected to the appropriate tests hereinbefore specified for wire rope or fibre rope, as the case may be, and has withstood such tests, and a test certificate complying with the requirements hereinbefore set out has been produced to the Chief Surveyor and accepted by him as satisfactory.

Tag for Fibre Ropes.

71. Every coil of fibre rope shall have attached thereto a tag made of strong manila paper or other equally strong material showing maker's name, brand, or trade description of the rope, guaranteed breaking load, date of manufacture, and identifying number or mark. Such tag or a duly certified copy thereof shall be deemed to be equivalent to the written guarantee referred to in Regulation 17.

## PART XII.—CARGO-LIFTING BLOCKS.

Sheaves.

72. (a) A sheave may be of cast metal.  
 (b) The surface of the groove shall be clean, smooth, and free from projections.  
 (c) The radius at the bottom of the groove shall be such as to give a reasonable clearance for the rope.  
 (d) The angle of the flare shall be from 50° to 60°.  
 (e) The groove shall be shaped in such a manner as to give ample support to the rope.

Block Ropes.

73. No block shall be rove with a wire rope having a diameter greater than the depth of the grooves in the sheaves or having a diameter such that there is not a reasonable clearance for the rope at the bottom of the grooves.

Lubrication.

74. Sheaves and swivel-heads shall be provided with efficient means of lubrication.

Sheave Pins.

75. Sheave pins shall be firmly secured to prevent rotation with the sheaves either by keying to the side or strap or in some other suitable manner.

Side Plates.

76. (a) Side plates shall be made of mild steel, cast steel, wrought iron, or malleable cast iron.  
 (b) Side plates shall project beyond the sheave to provide ample protection to the latter.

Shrouds.

77. (a) Shrouds or other means of preventing the rope from jamming between the cheek and the sheave shall be provided.  
 (b) The total side play between the boss faces of the sheaves and the side plate shall not in a new block exceed  $\frac{1}{16}$  in.

Head Fittings.

- 78. (a) The shanks of head fittings shall not be cold-riveted.
- (b) There shall be a fillet of adequate radius at the root of the shank, and the cross-head shall be suitably countersunk to receive it.
- (c) Where a screwed collar or nut is used cold-clinching is permitted.
- (d) Welded joints shall not be used in any bindings or crosshead of a block, but this prohibition shall not apply to the hinges of snatch (or natch) blocks.

Hooks, Eyes, Beekets, Bindings, and Straps.

- 79. (a) Hooks, eyes, beekets, bindings, and straps shall be made of wrought iron or mild steel, or of other suitable material.
- (b) Each becket shall be capable of carrying at least half the load on any one sheave.

Shackles.

- 80. (a) Notwithstanding Regulation 36 hereof, a shackle forming part of a block may be made of wrought iron or mild steel or of other suitable material.
- (b) There shall be legibly stamped on a non-vital part of every such shackle—
  - (i) The safe-working load of the shackle :
  - (ii) The identification number.

Locking of Nuts.

81. All nuts comprised in a block shall be securely locked.

Test Load.

- 82. The test load for a block shall be as follows :—
- (a) For single-sheave blocks : Four times the safe-working load.
- (b) For multiple-sheave blocks :—

Capacity of Block (Safe-working Load).	Test Load (in Tons).
Blocks up to and including 20 tons . .	Twice the safe-working load.
Blocks over 20 tons (up to and including 40 tons)	Safe-working load plus 20 tons.
Blocks over 40 tons . . . .	One and a half times the safe-working load.

Provided always that the test load applied to a block shall not exceed that which, in the opinion of the Chief Surveyor of Ships, may safely be applied thereto.

Method of Testing.

83. If blocks are reeved up for testing the end of the rope shall be attached to an independent anchorage, such as the frame of the testing-machine.

Examination after Test.

84. After application of any test the sheaves and pins of every block shall be removed and thoroughly examined and any part of the block shall be rejected which shows permanent deformation or any visible crack, flaw, or other defect.

Test Certificate required.

85. A test certificate in the form No. 2 set out in the First Schedule hereto and complying with the requirements therein indicated shall be supplied in respect of every block or group of blocks.

Testing of Repaired Blocks.

86. Blocks which have been repaired by the renewal or repair of any vital portion shall be retested in accordance with clauses 82 to 85 hereof, and thereupon the original marking thereon denoting the safe-working load shall, if necessary, be obliterated and the new safe-working load be marked thereon.

PART XIII.—DERRICKS.

Testing and Examination.

87. All derricks, derrick-fittings, and permanent attachments used in working cargo (all herein included in the term "derrick") shall be tested and examined once in every four years.

## Method of Testing.

88. Every derrick shall be so tested by subjecting it to a test load 25 per centum in excess of the required safe-working load: Provided that the excess load need not exceed 5 tons. During the test one derrick shall plumb the hatch and the other shall plumb overside the ship, both being in the normal working positions. The weight shall be lifted by one derrick and swung over until it is wholly supported by the other derrick, or each derrick may be tested separately by a dynamometer or other loading device.

## Limit of Test Load.

89. Nevertheless the test load applied to a derrick shall not exceed that which, in the opinion of the Chief Surveyor of Ships, may safely be applied thereto.

## Examination.

90. After testing, all gear shall be examined to see that no deformation or other defect has occurred or developed.

## PART XIV.—SAFE-WORKING LOADS.

## Short-link Chains.

91. The safe-working loads for short-link chains shall be those set out in Table No. 6 in the Third Schedule hereto.

## Single and Collar Slings.

92. The safe-working loads for single slings and collar slings of short-link chain carrying the load on a single part of the sling shall be those set out in Table No. 6 in the Third Schedule hereto.

## Two-legged Slings.

93. The safe-working loads for slings of short-link chain carrying the load on two parts or legs of the sling shall be those set out in Table No. 7 and Table No. 8 in the Third Schedule hereto.

## Long-link Chain.

94. (a) The safe-working loads for long-link chains when used over sheaves, pulleys, or drums, or when used as slings, shall be two-thirds of the safe-working loads for short-link chains set out in Table No. 6 aforesaid.

(b) The safe-working load for long-link chain when used otherwise than over sheaves, pulleys, or drums, or when not used as slings, shall be those as set out for short-link chains in Table No. 6 of the Third Schedule.

95. (a) The safe-working loads for enlarged-link chains when used otherwise than over sheaves, pulleys, or drums, or otherwise than as slings, shall be those set out in Table No. 10 in the Third Schedule hereto.

(b) The safe-working load for enlarged link chains when used over sheaves, pulleys, or drums, or when used as slings shall not exceed two-thirds of the safe-working load of a short-link chain of the same diameter as the enlarged-link chain as set out in Table No. 9 of the Third Schedule hereto nor the safe-working load set out in Table No. 10 of the Third Schedule hereto.

(c) When the inside width of an enlarged link exceeds the greatest width specified in Table No. 10 for the diameter of the link, the safe-working load for such link however used shall not exceed that computed from the formulæ set out in Table No. 16 for a ring with a diameter of iron and inside diameter corresponding to the diameter and inside width respectively of the enlarged link.

## Rings.

96. The safe-working loads for rings made of iron of the respective diameter set out in the Second Column of Tables No. 12 and No. 13 in the Second Schedule hereto, and having the respective ring-diameter set out in the Third Column of the said tables, shall be those of the short-linked chains set out in the First Column of the said tables.

97. The safe-working loads for rings having proportions differing from those set out in Tables No. 12 and No. 13 in the Second Schedule hereto shall be proportionate to those prescribed by the last preceding regulation so as to vary therefrom directly as the cube of the diameter of the iron of the ring and inversely as the mean of the inside and outside diameters of the ring.

98. Alternatively the safe-working loads for rings may be computed as set out and described in Table No. 16 in the Third Schedule hereto, and a load so computed, although it may differ from that prescribed by Regulations 96 and 97 hereof, shall be deemed to be the safe-working load for the purposes of these regulations.

## Shackles.

99. The safe-working load for any shackle shall be the maximum working load for the shackle-pin or the shackle-iron whichever is less.

## Straight-sided Shackles.

100. (a) The safe-working loads for shackle-iron of straight-sided shackles shall be those set out in Table No. 14 in the Third Schedule hereto.

(b) The safe-working loads for shackle-pins shall be those set out in Table No. 15 in the Third Schedule hereto.

(c) Alternatively the safe-working load for shackle-iron or shackle-pin may be computed in the manner set out and described in Table No. 16 of the Third Schedule hereto.

## Bow Shackles.

101. (a) The safe-working loads for the iron of bow shackles shall be computed as set out and described in Table No. 17 in the Third Schedule hereto.

(b) The safe-working loads for shackle-pins shall be those set out in Table No. 15 in the Third Schedule hereto.

102. Notwithstanding anything in Regulations 99, 100, and 101 hereof, where a shackle is made of special material or special design, or is to be used under conditions different from the ordinary conditions of service, the safe-working load thereof shall be such as is fixed by the Chief Surveyor of Ships.

## Swivels.

103. The safe-working loads for swivels shall be those set out in Table No. 18 in the Third Schedule hereto.

## Hooks.

104. The safe-working load for hooks of ordinary proportions shall be a weight in tons equal to the sectional area in square inches of the back of the curved portion of the hook or two and a half times a weight in tons equal to the least sectional area in square inches of the shank of the hook, whichever is less.

105. Nevertheless, where by reason of their proportions a greater safe-working load is claimed, or where dimensions and materials for hooks have been standardized, the safe-working loads thereof shall be such as are fixed by the Chief Surveyor of Ships by calculation from the dimensions of the hook or by testing or by both such methods, and for that purpose the Chief Surveyor of Ships may require one hook of each size for which the load is to be determined to be tested by a gradually increasing load up to its elastic limit or to destruction.

## Wire Ropes.

106. The safe-working loads for wire ropes shall be those set out under the heading "Working Load" in Tables No. 19 to No. 34 (inclusive) of the Third Schedule hereto according to the material, dimensions, construction, quality, and manner of use of the wire rope as set out in the said tables.

107. Notwithstanding anything herein contained, no greater weight shall be put on a wire-rope whip of any dimensions when attached to a ship's gear than—

- (a) 6 tons in the case of a double-wire rope whip with the hauling end taken to a position on the mast not lower than the position of the attachment of the derrick span to the mast; or
- (b) 5 tons in any other case of a double-wire whip; or
- (c) 2 tons 12 cwt. in the case of a single-wire whip:

Provided that this application shall not apply to wire ropes belonging to a Harbour Board crane or wharf crane.

## Fibre Ropes.

108. (a) The safe-working loads for fibre ropes shall be those set out under the heading "Working Load" in Table No. 35 to No. 40 (inclusive) of the Third Schedule hereto according to the grade, dimensions, and manner of use of the rope as set out in the said tables.

(b) Nevertheless, no greater load shall be put on a single-fibre rope yardarm than 1 ton 2 cwt.

## Blocks.

109. The safe-working loads for single-sheave blocks shall be such that the calculated stress on any part of the block due to the steady lifting of the load neglecting friction shall not exceed one-fifth of the calculated breaking load of the material of that part.

Other Gear.

110. (a) The safe-working load for any cargo gear for which a safe-working load is not otherwise provided by these regulations shall be such as is, upon the application of the owner of the gear, fixed or approved by the Chief Surveyor of Ships.

(b) In fixing a safe-working load under this regulation the Chief Surveyor shall have regard to the material, workmanship, design, dimensions, purpose, and intended use of the gear, and to all other relevant considerations, and shall, as far as may be, employ in his computations the factor of safety employed in computing the safe-working load (if any) prescribed by these regulations for gear of a similar character.

(c) A safe-working load may be so fixed either in respect of a single piece of gear or generally in respect of gear of a defined kind.

(d) Nothing in this regulation shall require the Chief Surveyor of Ships to fix a safe-working load for any gear which by reason of its material, workmanship, design, dimensions, or otherwise is in his opinion inherently unsafe for use in working cargo.

PART XV.—OFFENCES AND PENALTIES.

False Statements.

111. Every person is guilty of an offence who—

- (a) Issues a test certificate for any chain, chain attachment, wire rope, or fibre rope which has not been tested; or
- (b) Guarantees a breaking load for a fibre rope exceeding the breaking load approved by the Chief Surveyor of Ships, or issues a guarantee for fibre rope that specifies a breaking-load exceeding the breaking load approved by the Chief Surveyor of Ships; or
- (c) Makes a false statement in a test certificate or guarantee; or
- (d) Issues a copy of a test certificate that is not a true copy of the certificate of which it purports to be a copy.

Neglect, Obstruction, and Non-compliance.

112. Every person is guilty of an offence who fails, refuses, or neglects to do anything required by these regulations, or in any manner obstructs, impedes, or interferes with the doing of anything enjoined or authorized to be done by or under these regulations or wilfully does or causes or permits to be done anything prohibited by or contrary to these regulations.

Penalty.

113. Every person committing an offence against these regulations shall be liable to a penalty not exceeding £100.

FIRST SCHEDULE.

FORM No. 1.

Test Certificate for Short-Link Chain.

(Regulation 30.)

We hereby warrant that the chain supplied conforms in all respects to B.S. Specification No. 394/1930 for quality.

The actual results of the tensile test made on 36 in. sample of the chain supplied are as follows:—

1. Distinguishing Mark.	2. Nominal Size of Chain.	3. Proof Load applied.	4. Specified Test Load.	5. Elongation at Specified Test Load.	6. Ultimate Breaking Point.	7. Ultimate Elongation.
	In.		T.c.	In.	T.c.	In.

8. The results of the nicked tensile cold bend and hot bend tests were satisfactory.

9. The actual length of the chain to which this certificate refers is fathoms.

10. Name and address of the testing establishment

Signature of Manufacturer, &c.

I certify that the above-described chain was tested and examined in my presence in the manner prescribed in B.S. Specification No. 394/1930 for quality, and with the results set out above, and that no defect was found in it.

Signature of Testing Officer:  
Qualification:

Date: Address:



FORM No. 2.

Test Certificate for Cargo-lifting Blocks.  
(Regulation 84.)

1. Distinguishing Mark.	2. Description of Gear.	3. Number tested.	4. Test Load applied.	5. Date Test Load was applied.	6. Safe-working Load.

(a) Each block was examined by a competent person after the application of the test load, and was found to have withstood the load without deformation, and to be free from visible cracks, flaws, or other defects.

(b) The sheaves and pins of each block were removed for the examination covered by paragraph (a).

(c) Name and address of makers or suppliers

(d) Name and address of firm or person making the test and examination (Columns 4 and 5 para. (a)):

I hereby certify on behalf of the persons named in paragraph (c) above that the above particulars are correct.

Signature:  
Date:

SECOND SCHEDULE.

Table No. 1.

SHORT-LINK CHAIN.

Nominal Size of Chain.		Weight per Fathom.		Proof Load.		Test Load.		Elongation.			
In.	Lb.	T. cwt.	qr. lb.	Tons cwt.	In.	In.	Lb.	T. cwt.	qr. lb.	Tons cwt.	In.
$\frac{1}{4}$	5 $\frac{1}{2}$	0 15	0 0	1 18	5	$1\frac{3}{16}$	89	16 18	1 21	37 6	5 $\frac{1}{4}$
$\frac{5}{16}$	7 $\frac{1}{2}$	1 3	1 21	2 19	5	$1\frac{1}{4}$	98	18 15	0 0	41 5	5 $\frac{1}{4}$
$\frac{3}{8}$	10 $\frac{1}{4}$	1 13	3 0	4 3	5 $\frac{1}{4}$	$1\frac{1}{16}$	107	20 13	1 21	45 7	5 $\frac{1}{4}$
$\frac{7}{16}$	13 $\frac{1}{2}$	2 5	3 21	5 10	5 $\frac{1}{2}$	$1\frac{3}{8}$	118	22 13	3 0	49 14	5
$\frac{1}{2}$	17 $\frac{1}{2}$	3 0	0 0	7 2	5 $\frac{3}{4}$	$1\frac{7}{16}$	129	24 15	3 21	54 4	5
$\frac{9}{16}$	22 $\frac{1}{2}$	3 15	3 21	8 17	5 $\frac{1}{2}$	$1\frac{1}{2}$	140	27 0	0 0	58 18	5
$\frac{5}{8}$	27	4 13	3 0	10 16	5 $\frac{1}{2}$	$1\frac{9}{16}$	150	29 5	3 21	63 6	5
$\frac{11}{16}$	32	5 13	1 21	13 0	5 $\frac{3}{4}$	$1\frac{5}{8}$	161	31 13	3 0	68 18	5
$\frac{3}{4}$	37	6 15	0 0	15 7	5 $\frac{1}{2}$	$1\frac{11}{16}$	172	34 3	1 21	74 4	5
$\frac{7}{8}$	43	7 18	1 21	17 18	5 $\frac{1}{2}$	$1\frac{3}{4}$	184	36 15	0 0	79 14	5
$\frac{15}{16}$	51	9 3	3 0	20 13	5 $\frac{1}{2}$	$1\frac{13}{16}$	196	39 8	1 21	85 8	5
1	57	10 10	3 21	23 12	5 $\frac{1}{2}$	$1\frac{1}{2}$	209	42 3	3 0	91 6	5
$1\frac{1}{16}$	66	12 0	0 0	26 14	5 $\frac{1}{2}$	$1\frac{15}{16}$	223	45 0	3 21	97 8	5
$1\frac{1}{8}$	73	13 10	3 21	30 1	5 $\frac{1}{2}$	2	238	48 0	0 0	103 12	5
$1\frac{1}{4}$	82	15 3	3 0	33 12	5 $\frac{1}{2}$						

**Table No. 2.**  
**BLACK-STEEL-WIRE ROPES.—BREAKING-LOADS.**  
 (Quality: Special Improved Patent Steel. Tensile strength of wires,  
 90-100 tons per square inch.)

Size of Rope.		Construction: Six Strands of 19 Wires each.	Construction: Six Strands of 24 Wires each.	Construction: Six Strands of 37 Wires each.
Circumference, in Inches.	Diameter, in Inches (approximate).	Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.
<b>1</b> $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $1$	$\frac{5}{16}$	3.0	2.7	2.9
	$\frac{13}{32}$	4.7	4.5	4.3
	$\frac{15}{32}$	6.7	6.3	6.4
	$\frac{9}{16}$	9.1	8.4	9.0
<b>2</b> $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $1$	$\frac{5}{8}$	12.4	11.5	11.9
	$\frac{23}{32}$	15.6	14.3	15.3
	$\frac{13}{16}$	19.1	17.4	18.1
	$\frac{7}{8}$	22.9	21.6	22.3
<b>3</b> $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $1$	$\frac{15}{16}$	28.9	25.4	26.9
	$1\frac{1}{32}$	33.6	30.5	30.6
	$1\frac{1}{8}$	39.6	35.0	36.0
	$1\frac{3}{16}$	45.1	39.7	41.7
<b>4</b> $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $1$	$1\frac{9}{32}$	50.9	46.0	47.8
	$1\frac{11}{32}$	57.1	51.4	54.4
	$1\frac{7}{16}$	65.0	57.2	59.6
	$1\frac{1}{2}$	71.9	64.7	67.0
<b>5</b> $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $1$	$1\frac{19}{32}$	79.2	71.1	74.7
	$1\frac{11}{16}$	88.5	77.9	83.0
	$1\frac{3}{4}$	96.5	84.9	89.3
	$1\frac{27}{32}$	104.9	94.0	98.3
<b>6</b>	$1\frac{29}{32}$	115.5	101.7	107.6

Table No. 3.  
 GALVANIZED-STEEL-WIRE ROPES.—BREAKING-LOADS.  
 (Quality: Hawser Basic. Tensile strength of wires, 85-95 tons per square inch.)

Size of Rope.		Flexible.	Special.	Flexible.
Circumference, in Inches.	Diameter, in Inches (approximate).	Construction: Six Strands of 12 Wires each.	Construction: Six Strands of 24 Wires each.	Construction: Six Strands of 30 Wires each.
		Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.	Actual Breaking-load, in Tons.
1	$\frac{5}{16}$	2.0	2.6	2.6
$1\frac{1}{4}$	$\frac{13}{32}$	3.1	4.4	3.6
$1\frac{1}{2}$	$\frac{15}{32}$	4.8	6.1	5.4
$1\frac{3}{4}$	$\frac{9}{16}$	6.4	8.7	7.5
2	$\frac{5}{8}$	8.3	11.2	10.0
$2\frac{1}{4}$	$\frac{23}{32}$	10.8	14.7	12.8
$2\frac{1}{2}$	$\frac{13}{16}$	13.2	17.7	15.2
$2\frac{3}{4}$	$\frac{7}{8}$	15.2	21.1	19.6
3	$\frac{15}{16}$	18.6	25.7	23.5
$3\frac{1}{4}$	$1\frac{1}{32}$	21.7	29.7	25.6
$3\frac{1}{2}$	$1\frac{1}{8}$	25.7	35.2	30.1
$3\frac{3}{4}$	$1\frac{3}{16}$	29.3	39.9	34.9
4	$\frac{19}{32}$	33.2	44.9	40.1
$4\frac{1}{4}$	$\frac{11}{32}$	36.4	51.5	45.6
$4\frac{1}{2}$	$\frac{17}{16}$	43.3	58.6	51.4
$4\frac{3}{4}$	$1\frac{1}{2}$	47.0	64.6	57.6
5	$\frac{19}{32}$	52.8	70.9	64.2
$5\frac{1}{4}$	$\frac{11}{16}$	..	77.5	71.2
$5\frac{1}{2}$	$1\frac{3}{4}$	..	84.4	76.6
$5\frac{3}{4}$	$1\frac{27}{32}$	..	91.5	82.3
6	$\frac{129}{32}$	..	99.1	92.1
$6\frac{1}{4}$	2	..	104.5	98.3
$6\frac{1}{2}$	$\frac{23}{32}$	..	112.3	104.7
$6\frac{3}{4}$	$\frac{25}{32}$	..	120.3	111.2
7	$\frac{27}{32}$	..	130.7	120.0
$7\frac{1}{2}$	$\frac{23}{8}$	..	..	131.8
8	$\frac{217}{32}$	..	..	148.8

Table No. 4.  
 TABLE OF BREAKING-LOADS FOR ORDINARY-GRADE ROUND FIBRE ROPES.  
 (Ropes closely spun and not tarred.)

Size of Rope.		Breaking-load, in Pounds.	Size of Rope.		Breaking-load, in Pounds.
Circumference, in Inches.	Diameter, in Inches (approximate).		Circumference, in Inches.	Diameter, in Inches (approximate).	
1	$\frac{5}{16}$	810	$3\frac{1}{8}$	$1\frac{1}{8}$	9,882
$1\frac{1}{4}$	$\frac{13}{32}$	1,260	$3\frac{3}{4}$	$\frac{13}{16}$	11,340
$1\frac{1}{2}$	$\frac{15}{32}$	1,818	4	$\frac{9}{32}$	12,906
$1\frac{3}{4}$	$\frac{9}{16}$	2,466	$4\frac{1}{4}$	$\frac{11}{32}$	14,565
2	$\frac{5}{8}$	3,222	$4\frac{1}{2}$	$\frac{17}{16}$	16,326
$2\frac{1}{4}$	$\frac{23}{32}$	4,086	$4\frac{3}{4}$	$1\frac{1}{2}$	18,195
$2\frac{1}{2}$	$\frac{13}{16}$	5,040	5	$\frac{19}{32}$	20,160
$2\frac{3}{4}$	$\frac{7}{8}$	6,102	$5\frac{1}{2}$	$\frac{3}{4}$	24,390
3	$\frac{15}{16}$	7,254	6	$\frac{29}{32}$	29,034
$3\frac{1}{4}$	$1\frac{1}{32}$	8,514			

Table No. 5.

TABLE OF BREAKING-LOADS FOR HIGHER-GRADE ROUND FIBRE ROPES.  
This grade to be distinguished by a red thread spun into the centre of one strand.  
(Ropes closely spun and not tarred.)

Size of Rope.		Breaking-load, in Pounds.	Size of Rope.		Breaking-load in Pounds.
Circumference, in Inches.	Diameter, in Inches (approximate).		Circumference, in Inches.	Diameter, in Inches (approximate).	
1	5/16	1,012	3 1/2	1 1/8	12,352
1 1/4	13/32	1,575	3 3/4	1 3/16	14,175
1 1/2	15/32	2,272	4	1 9/32	16,132
1 3/4	9/16	3,082	4 1/4	1 11/32	18,206
2	5/8	4,027	4 1/2	1 7/16	20,407
2 1/4	23/32	5,107	4 3/4	1 1/2	22,744
2 1/2	13/16	6,300	5	1 9/32	25,200
2 3/4	7/8	7,627	5 1/2	1 3/4	30,487
3	15/16	9,067	6	1 29/32	36,292
3 1/4	1 1/32	10,642			

THIRD SCHEDULE.

Table No. 6.—Safe Working Loads.

TABLE OF SAFE-WORKING LOADS FOR SHORT-LINK CHAIN, AND FOR SINGLE SLINGS AND COLLAR SLINGS OF CHAIN CARRYING THE LOAD ON A SINGLE PART OF THE SLING.

Diameter of Iron of Chain, in Inches.	Maximum Safe-working Loads.		Diameter of Iron of Chain, in Inches.	Maximum Safe-working Loads.	
	Loads, in Tons, &c.	Loads, in Pounds.		Loads, in Tons, &c.	Loads, in Pounds.
1/16 1/8 3/16 1/4 5/16 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4	T. cwt. qr. lb.	756	1 1/16 1 1/8 1 1/4 1 3/8 1 1/2 1 5/8 1 3/4 1 7/8 1 15/16 2 2 1/8 2 1/4 2 1/2	T. cwt. qr. lb.	17,057
	0 6 3 0	1,181		7 12 1 5	18,900
	0 10 2 5	1,701		8 8 3 0	20,837
	0 15 0 21	2,315		9 6 0 5	22,869
	1 0 2 19	3,024		10 4 0 21	24,995
	1 7 0 0	3,827		11 3 0 19	27,216
	1 14 0 19	4,725		12 3 0 0	29,531
	2 2 0 21	5,717		13 3 2 19	31,941
	2 11 0 5	6,804		14 5 0 21	34,445
	3 0 3 0	7,985		15 7 2 5	37,044
	3 11 1 5	9,261		16 10 3 0	39,737
	4 2 2 21	10,631		17 14 3 5	42,525
	4 14 3 19	12,096		18 19 2 21	45,407
5 8 0 0	13,655	20 5 1 19	48,384		
6 1 3 19	15,209	21 12 0 0			

Table No. 7.  
TABLE OF SAFE-WORKING LOADS FOR CHAIN SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING.

Diameter of Chain Iron of Sling, in Inches.		Safe-working Loads for various Angles between Legs.												Diameter of Chain Iron of Sling, in Inches.			
		Angle between Legs, parallel.		Angle between Legs, 30°.		Angle between Legs, 45°.		Angle between Legs, 60°.		Angle between Legs, 90°.		Angle between Legs, 120°.				Angle between Legs, 150°.	
		Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.			Load, in Tons, &c.	Load, in Pounds.
In.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	In.		
0 13 2 0	1,512	0 13 0 4	1,460	0 11 2 21	1,309	0 9 2 5	1,069	0 6 3 0	756	0 3 1 27	391	1 1 1 10	611	1 1 1 10	1 1 1 10		
1 1 0 10	2,362	1 0 1 13	2,281	0 13 1 1	2,045	0 14 3 18	1,670	0 10 2 5	1,181	0 5 1 23	611	1 1 1 10	880	1 1 1 10	1 1 1 10		
1 10 1 14	3,402	1 9 1 10	3,286	1 6 1 6	2,946	1 1 1 25	2,405	0 15 0 21	1,701	0 7 3 12	880	1 1 1 10	1,198	1 1 1 10	1 1 1 10		
2 1 1 10	4,630	1 19 3 20	4,472	1 15 3 6	4,010	1 9 0 26	3,274	1 0 2 19	2,315	0 10 2 22	1,198	1 1 1 10	1,565	1 1 1 10	1 1 1 10		
2 14 0 0	6,048	2 12 0 17	5,841	2 6 3 1	5,237	1 18 0 20	4,276	1 7 0 0	3,024	0 13 3 25	1,565	1 1 1 10	1,981	1 1 1 10	1 1 1 10		
3 8 1 10	7,654	3 6 0 1	7,393	2 19 0 20	6,628	2 8 1 8	5,412	1 14 0 19	3,827	0 17 2 21	1,981	1 1 1 10	2,445	1 1 1 10	1 1 1 10		
4 4 1 14	9,450	4 1 2 0	9,128	3 13 0 7	8,183	2 19 2 18	6,682	2 2 0 21	4,725	1 1 3 9	2,445	1 1 1 10	2,959	1 1 1 10	1 1 1 10		
5 2 0 10	11,434	4 18 2 12	11,044	4 8 1 18	9,902	3 12 0 21	8,085	2 11 0 5	5,717	1 6 1 19	2,959	1 1 1 10	3,522	1 1 1 10	1 1 1 10		
6 1 2 0	13,608	5 17 1 12	13,144	5 5 0 24	11,784	4 5 3 18	9,622	3 0 3 0	6,804	1 11 1 22	3,522	1 1 1 10	4,133	1 1 1 10	1 1 1 10		
7 2 2 10	15,970	6 17 2 26	15,426	6 3 1 26	13,830	5 0 3 8	11,292	3 11 1 5	7,985	1 16 3 17	4,133	1 1 1 10	4,793	1 1 1 10	1 1 1 10		
8 5 1 14	18,522	7 19 2 26	17,890	7 3 0 24	16,040	5 16 3 21	13,097	4 2 2 21	9,261	2 2 3 5	4,793	1 1 1 10	5,503	1 1 1 10	1 1 1 10		
9 9 3 10	21,262	9 3 1 13	20,537	8 4 1 17	18,413	6 14 0 26	15,034	4 14 3 19	10,631	2 9 0 15	5,503	1 1 1 10	6,261	1 1 1 10	1 1 1 10		
10 16 0 0	24,192	10 8 2 15	23,367	9 7 0 6	20,950	7 12 2 26	17,106	5 8 0 0	12,096	2 15 3 17	6,261	1 1 1 10	7,068	1 1 1 10	1 1 1 10		
1 1 1 10	27,310	11 15 2 3	26,379	10 11 0 19	23,651	8 12 1 19	19,311	6 1 3 19	13,655	3 3 0 12	7,068	1 1 1 10	7,924	1 1 1 10	1 1 1 10		
1 1 1 10	30,618	13 4 0 6	29,574	11 16 3 0	26,516	9 13 1 6	21,650	6 16 2 21	15,309	3 10 3 0	7,924	1 1 1 10	8,829	1 1 1 10	1 1 1 10		
1 1 1 10	34,114	14 14 0 23	32,951	13 3 3 4	29,544	10 15 1 14	24,122	7 12 1 5	17,057	3 18 3 9	8,829	1 1 1 10	9,783	1 1 1 10	1 1 1 10		
1 1 1 10	37,800	16 6 0 0	36,512	14 12 1 3	32,735	11 18 2 16	26,728	8 8 3 0	18,900	4 7 1 11	9,783	1 1 1 10	10,786	1 1 1 10	1 1 1 10		
1 1 1 10	41,674	17 19 1 18	40,254	16 2 0 27	36,091	13 3 0 12	29,468	9 6 0 5	20,837	4 16 1 6	10,786	1 1 1 10	11,837	1 1 1 10	1 1 1 10		
1 1 1 10	45,738	19 14 1 23	44,179	17 13 2 18	39,610	14 8 3 1	32,341	10 4 0 21	22,869	5 5 2 21	11,837	1 1 1 10	12,938	1 1 1 10	1 1 1 10		
1 1 1 10	49,990	21 11 0 14	48,236	19 6 2 5	43,293	15 15 2 12	35,348	11 3 0 19	24,995	5 15 2 2	12,938	1 1 1 10	14,088	1 1 1 10	1 1 1 10		
1 1 1 10	54,432	23 9 1 21	52,577	21 0 3 15	47,139	17 3 2 17	38,489	12 3 0 0	27,216	6 5 3 4	14,088	1 1 1 10	15,286	1 1 1 10	1 1 1 10		
1 1 1 10	59,062	25 9 1 13	57,049	22 16 2 21	51,149	18 12 3 15	41,763	13 3 2 19	29,531	6 16 1 26	15,286	1 1 1 10	16,533	1 1 1 10	1 1 1 10		
1 1 1 10	63,882	27 10 3 21	61,705	24 13 3 23	55,323	20 3 1 7	45,171	14 5 0 21	31,941	7 7 2 13	16,533	1 1 1 10	17,830	1 1 1 10	1 1 1 10		
1 1 1 10	68,890	29 14 0 14	66,542	26 12 2 20	59,660	21 14 3 20	48,712	15 7 2 5	34,445	7 19 0 22	17,830	1 1 1 10	19,175	1 1 1 10	1 1 1 10		
1 1 1 10	74,088	31 18 3 23	71,563	28 12 3 14	64,162	23 7 3 0	52,388	16 10 3 0	37,044	8 11 0 23	19,175	1 1 1 10	20,669	1 1 1 10	1 1 1 10		
1 1 1 10	79,474	34 5 1 18	76,766	30 14 2 2	68,826	25 1 3 1	56,197	17 14 3 5	39,737	9 3 2 17	20,669	1 1 1 10	22,012	1 1 1 10	1 1 1 10		
1 1 1 10	85,050	36 13 2 0	82,152	32 17 2 15	73,655	26 16 3 23	60,139	18 19 2 21	42,525	9 16 2 4	22,012	1 1 1 10	23,504	1 1 1 10	1 1 1 10		
1 1 1 10	90,814	39 3 0 23	87,719	35 2 0 23	78,647	28 13 1 11	64,215	20 5 1 19	45,407	10 9 3 12	23,504	1 1 1 10	25,045	1 1 1 10	1 1 1 10		
2	96,768	41 14 2 6	93,470	37 8 0 27	83,803	30 10 3 21	68,425	21 12 0 0	48,384	11 3 3 13	25,045	2					

Table No. 8.

TABLE OF SAFE-WORKING LOADS FOR CHAIN SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING.

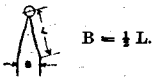
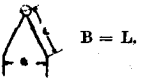

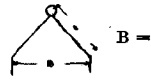
Diameter of Iron of Chain Sling, in Inches.		Safe-working Loads for various Distances between Legs.										Diameter of Iron of Chain Sling, in Inches.	
		Legs parallel.		 $B = \frac{1}{2} L.$		 $B = L.$		 $B = 1\frac{1}{2} L.$		 $B = 1\frac{1}{2} L.$			
		Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.	Load, in Tons, &c.	Load, in Pounds.		
In.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	T. cwt. qr. lb.	Lb.	In.		
$\frac{1}{16}$	0 13 2 0	1,512	0 13 0 7	1,463	0 11 2 21	1,309	0 8 3 20	1,000	0 6 2 3	731	$\frac{1}{16}$		
$\frac{1}{8}$	1 1 0 10	2,362	1 0 1 19	2,287	0 18 1 1	2,045	0 13 3 22	1,562	0 10 0 23	1,143	$\frac{1}{8}$		
$\frac{1}{4}$	1 10 1 14	3,402	1 9 1 17	3,293	1 6 1 6	2,946	1 0 0 10	2,250	0 14 2 22	1,646	$\frac{1}{4}$		
$\frac{3}{8}$	2 1 1 10	4,630	2 0 0 3	4,483	1 15 3 6	4,010	1 7 1 10	3,062	1 0 0 1	2,241	$\frac{3}{8}$		
$\frac{1}{2}$	2 14 0 0	6,048	2 12 1 3	5,855	2 6 3 1	5,237	1 15 2 24	4,000	1 6 0 15	2,927	$\frac{1}{2}$		
$\frac{5}{8}$	3 8 1 10	7,654	3 6 0 19	7,411	2 19 0 20	6,628	2 5 0 23	5,063	1 13 0 9	3,705	$\frac{5}{8}$		
$\frac{3}{4}$	4 4 1 14	9,450	4 1 2 21	9,149	3 13 0 7	8,183	2 15 3 6	6,250	2 0 3 10	4,574	$\frac{3}{4}$		
$\frac{7}{8}$	5 2 0 10	11,434	4 18 3 11	11,071	4 8 1 18	9,902	3 7 2 3	7,563	2 9 1 19	5,535	$\frac{7}{8}$		
1	6 1 2 0	13,608	5 17 2 15	13,175	5 5 0 24	11,784	4 0 1 12	9,000	2 18 3 7	6,587	1		
$1\frac{1}{8}$	7 2 2 10	15,970	6 18 0 7	15,463	6 3 1 26	13,830	4 14 1 7	10,563	3 9 0 3	7,731	$1\frac{1}{8}$		
$1\frac{1}{4}$	8 5 1 14	18,522	8 0 0 13	17,933	7 3 0 24	16,040	5 9 1 15	12,251	4 0 0 6	8,966	$1\frac{1}{4}$		
$1\frac{1}{2}$	9 9 3 10	21,262	9 3 3 7	20,587	8 4 1 17	18,413	6 5 2 7	14,063	4 11 3 17	10,293	$1\frac{1}{2}$		
$1\frac{3}{8}$	10 16 0 0	24,192	10 9 0 15	23,423	9 7 0 6	20,950	7 2 3 13	16,001	5 4 2 7	11,711	$1\frac{3}{8}$		
$1\frac{1}{2}$	12 3 3 10	27,310	11 16 0 11	26,443	10 11 0 19	23,651	8 1 1 4	18,064	5 18 0 5	13,221	$1\frac{1}{2}$		
$1\frac{5}{8}$	13 13 1 14	30,618	13 4 2 21	29,645	11 16 3 0	26,616	9 0 3 7	20,251	6 12 1 10	14,822	$1\frac{5}{8}$		
$1\frac{3}{4}$	15 4 2 10	34,114	14 14 3 19	33,031	13 3 3 4	29,544	10 1 1 24	22,564	7 7 1 23	16,515	$1\frac{3}{4}$		
$1\frac{7}{8}$	16 17 2 0	37,800	16 6 3 3	36,599	14 12 1 3	32,735	11 3 0 26	25,002	8 3 1 15	18,299	$1\frac{7}{8}$		
$1\frac{1}{2}$	18 12 0 10	41,674	18 0 1 3	40,351	16 2 0 27	36,091	12 6 0 13	27,565	9 0 0 15	20,175	$1\frac{1}{2}$		
$1\frac{5}{8}$	20 8 1 14	45,738	19 15 1 17	44,285	17 13 2 18	39,610	13 10 0 12	30,252	9 17 2 22	22,142	$1\frac{5}{8}$		
$1\frac{3}{4}$	22 6 1 10	49,990	21 12 0 19	48,403	19 6 2 5	43,293	14 15 0 25	33,065	10 16 0 9	24,201	$1\frac{3}{4}$		
$1\frac{7}{8}$	24 6 0 0	54,432	23 10 2 7	52,703	21 0 3 15	47,139	16 1 1 23	36,003	11 15 1 3	26,351	$1\frac{7}{8}$		
1 1/2	26 7 1 10	59,062	25 10 2 11	57,187	22 16 2 21	51,149	17 8 3 6	39,066	12 15 1 5	28,593	1 1/2		
$1\frac{1}{8}$	28 10 1 14	63,882	27 12 1 1	61,853	24 13 3 23	55,323	18 17 1 2	42,254	13 16 0 14	30,926	$1\frac{1}{8}$		
$1\frac{3}{8}$	30 15 0 10	68,890	29 15 2 7	66,703	26 12 2 20	59,660	20 6 3 10	45,566	14 17 3 3	33,351	$1\frac{3}{8}$		
$1\frac{1}{2}$	33 1 2 0	74,088	32 0 1 27	71,735	28 12 3 14	64,162	21 17 2 4	49,004	16 0 0 27	35,867	$1\frac{1}{2}$		
$1\frac{5}{8}$	35 9 2 10	79,474	34 7 0 6	76,950	30 14 2 2	68,826	23 9 1 11	52,567	17 3 2 3	38,475	$1\frac{5}{8}$		
$1\frac{3}{4}$	37 19 1 14	85,050	36 15 1 1	82,349	32 17 2 15	73,655	25 2 1 3	56,255	18 7 2 14	41,174	$1\frac{3}{4}$		
$1\frac{7}{8}$	40 10 3 10	90,814	39 5 0 10	87,930	35 2 0 23	78,647	26 16 1 8	60,068	19 12 2 5	43,965	$1\frac{7}{8}$		
2	43 4 0 0	96,768	41 16 2 7	93,695	37 8 0 27	83,803	28 11 1 26	64,006	20 18 1 3	46,847	2		

Table No. 9.

TABLE OF SIZES FOR CHAIN SLINGS CARRYING THE LOAD ON TWO PARTS OR LEGS OF THE SLING.

Safe-working Load, in Tons.	Safe-working Load, in Pounds.	Sizes of Chain for various Distances between Legs. (Sizes to nearest sixteenth of an inch.)					Safe-working Load, in Pounds.	Safe-working Load, in Tons.
		Legs Parallel.	$B = \frac{1}{2} L.$	$B = L.$	$B = 1\frac{1}{2} L.$	$B = 1\frac{1}{4} L.$		
		Diameter of Iron of Chain, in Inches.						
1	560	..	..	..	..	1	560	1
1 1/8	1,120	1/16	1/16	1/16	1/16	1 1/8	1,120	1 1/8
1 1/4	1,680	1/8	1/8	1/8	1/8	1 1/4	1,680	1 1/4
1 1/2	2,240	3/16	3/16	3/16	3/16	1 1/2	2,240	1 1/2
1 3/4	3,360	1/4	1/4	1/4	1/4	1 3/4	3,360	1 3/4
2	4,480	5/16	5/16	5/16	5/16	2	4,480	2
2 1/4	5,600	3/8	3/8	3/8	3/8	2 1/4	5,600	2 1/4
2 1/2	6,720	7/16	7/16	7/16	7/16	2 1/2	6,720	2 1/2
2 3/4	7,840	1/2	1/2	1/2	1/2	2 3/4	7,840	2 3/4
3	8,960	9/16	9/16	9/16	9/16	3	8,960	3
3 1/4	10,080	5/8	5/8	5/8	5/8	3 1/4	10,080	3 1/4
3 1/2	11,200	11/16	11/16	11/16	11/16	3 1/2	11,200	3 1/2
3 3/4	13,440	3/4	3/4	3/4	3/4	3 3/4	13,440	3 3/4
4	15,680	13/16	13/16	13/16	13/16	4	15,680	4
4 1/4	17,920	7/8	7/8	7/8	7/8	4 1/4	17,920	4 1/4
4 1/2	20,160	15/16	15/16	15/16	15/16	4 1/2	20,160	4 1/2
4 3/4	22,400	1	1	1	1	4 3/4	22,400	4 3/4
5	24,640	1 1/16	1 1/16	1 1/16	1 1/16	5	24,640	5
6	26,880	1 1/8	1 1/8	1 1/8	1 1/8	6	26,880	6
7	29,120	1 1/4	1 1/4	1 1/4	1 1/4	7	29,120	7
8	31,360	1 1/2	1 1/2	1 1/2	1 1/2	8	31,360	8
9	33,600	1 3/4	1 3/4	1 3/4	1 3/4	9	33,600	9
10	35,840	1 7/8	1 7/8	1 7/8	1 7/8	10	35,840	10
11	38,080	1 15/16	1 15/16	1 15/16	1 15/16	11	38,080	11
12	40,320	2	2	2	2	12	40,320	12
13	42,560	2 1/16	2 1/16	2 1/16	2 1/16	13	42,560	13
14	44,800	2 1/8	2 1/8	2 1/8	2 1/8	14	44,800	14
15	47,040	2 1/4	2 1/4	2 1/4	2 1/4	15	47,040	15
16	49,280	2 3/8	2 3/8	2 3/8	2 3/8	16	49,280	16
17	51,520	2 1/2	2 1/2	2 1/2	2 1/2	17	51,520	17
18	53,760	2 5/8	2 5/8	2 5/8	2 5/8	18	53,760	18
19	56,000	2 3/4	2 3/4	2 3/4	2 3/4	19	56,000	19
20	58,240	2 7/8	2 7/8	2 7/8	2 7/8	20	58,240	20
21	60,480	3	3	3	3	21	60,480	21
22	62,720	3 1/16	3 1/16	3 1/16	3 1/16	22	62,720	22
23	64,960	3 1/8	3 1/8	3 1/8	3 1/8	23	64,960	23
24	67,200	3 1/4	3 1/4	3 1/4	3 1/4	24	67,200	24
25	69,440	3 3/8	3 3/8	3 3/8	3 3/8	25	69,440	25
26	71,680	3 1/2	3 1/2	3 1/2	3 1/2	26	71,680	26
27	73,920	3 5/8	3 5/8	3 5/8	3 5/8	27	73,920	27
28	76,160	3 3/4	3 3/4	3 3/4	3 3/4	28	76,160	28
29	78,400	3 7/8	3 7/8	3 7/8	3 7/8	29	78,400	29
30	80,640	4	4	4	4	30	80,640	30
31	82,880	4 1/16	4 1/16	4 1/16	4 1/16	31	82,880	31
32	85,120	4 1/8	4 1/8	4 1/8	4 1/8	32	85,120	32
33	87,360	4 1/4	4 1/4	4 1/4	4 1/4	33	87,360	33
34	89,600	4 3/8	4 3/8	4 3/8	4 3/8	34	89,600	34
35	91,840	4 1/2	4 1/2	4 1/2	4 1/2	35	91,840	35
36	94,080	4 5/8	4 5/8	4 5/8	4 5/8	36	94,080	36
37	96,320	4 3/4	4 3/4	4 3/4	4 3/4	37	96,320	37
38		4 7/8	4 7/8	4 7/8	4 7/8	38		38
39		5	5	5	5	39		39
40		5 1/16	5 1/16	5 1/16	5 1/16	40		40
41		5 1/8	5 1/8	5 1/8	5 1/8	41		41
42		5 1/4	5 1/4	5 1/4	5 1/4	42		42
43		5 3/8	5 3/8	5 3/8	5 3/8	43		43



Table 10.—Safe Working Load of Enlarged Links.

(The Safe Working Load of enlarged links of widths exceeding those given in this table shall be found as for a ring.)

Dia- meter of Iron.	Inside Width.	Safe Working Load.		Dia- meter of Iron.	Inside Width.	Safe Working Load.		Dia- meter of Iron.	Inside Width.	Safe Working Load.							
In.	In.	T. cwt.	qr. lb.	In.	In.	T. cwt.	qr. lb.	In.	In.	T. cwt.	qr. lb.						
1/2	7/8	1	3	1	3	1	3	1/2	7/8	14	5						
	1	0	19	3	10	12	3		0	5							
	1 1/8	0	16	2	19	10	4		0	25							
	1 1/4	0	13	3	3	8	8		3	3							
	1 1/2	0	11	0	18	6	16		2	23							
3/8	1	1	9	1	24	3/8	11	1	6	1 1/8	3 1/8	15	5	3	17		
	1 1/8	1	5	0	12		5	11	3		15	3 1/8	13	0	2	18	
	1 1/4	1	1	0	11		4	14	0		1	4 1/8	10	19	0	2	
	1 1/2	0	17	1	21		3	17	2		22	4 1/2	9	1	0	1	
	1 3/8	0	14	0	16		3 1/4	3	2		3	20	5	7	6	2	13
1/2	1 1/8	1	16	1	14	1 1/2	2 3/8	7	5	2	6	1 3/8	3 1/4	16	7	1	19
	1 1/4	1	10	3	27		2 1/2	6	4	0	2		3 1/8	13	19	0	0
	1 1/2	1	6	0	5		2 1/4	5	4	0	24		4 1/4	11	14	1	19
	1 3/8	1	1	2	2		3 1/8	4	6	0	14		4 1/2	9	13	2	27
	1 1/2	0	17	1	21		3 1/2	3	9	3	1		5 1/8	7	16	3	20
3/4	1 3/8	2	4	0	3	1 5/8	2 5/8	8	0	1	22	1 3/4	3 3/8	17	9	2	9
	1 1/2	1	17	2	1		2 3/4	6	16	2	24		3 1/2	14	17	3	15
	1 3/4	1	11	2	0		2 1/2	5	14	3	14		4 1/8	12	10	1	5
	1 1/2	1	6	0	5		3 1/8	4	14	3	21		4 1/2	10	6	3	12
	1 3/8	1	1	0	11		3 1/2	3	16	3	17		5 1/8	8	7	2	6
1/2	1 3/8	2	12	1	15	1 3/8	2 7/8	8	16	0	11	2	3 1/2	18	12	2	0
	1 1/2	2	4	2	15		2 3/4	7	10	0	5		4	15	17	1	17
	1 3/4	1	17	2	0		3 1/8	6	6	0	9		4 1/2	13	6	2	23
	1 1/2	1	10	3	27		3 1/2	5	4	0	22		5	11	0	1	19
	2 1/8	1	5	0	12		3 3/4	4	4	1	17		5 1/2	8	18	2	4
3/4	1 3/8	3	1	1	26	1 7/8	2 1/2	9	12	1	16	2 1/8	3 3/4	21	0	2	0
	1 1/2	2	12	1	15		2 3/4	8	3	3	20		4 1/2	17	18	1	6
	1 3/4	2	4	0	2		3 1/4	6	17	3	0		4 3/4	15	1	0	9
	2	1	16	1	14		3 3/8	5	13	3	10		5 1/8	12	8	3	8
	2 1/4	1	9	1	24		3 1/2	4	12	0	24		5 3/8	10	1	2	4
1/2	1 1/8	3	11	1	5	1 1/2	2 5/8	10	9	2	3	2 1/4	3 1/8	23	11	1	21
	1 1/4	3	0	3	0		3	8	18	2	4		4 1/8	20	1	2	22
	2	2	11	0	5		3 1/8	7	10	0	2		5 1/8	16	17	2	4
	2 1/8	2	2	0	21		3 1/2	6	3	3	26		5 3/8	13	18	3	24
	2 3/8	1	14	0	19		4 1/8	5	0	1	20		6 1/8	11	5	3	26
3/4	1 3/8	4	1	3	11	1 5/8	2 3/4	11	7	1	8	2 3/8	4 1/8	26	5	1	1
	1 1/2	3	9	2	26		3 1/8	9	13	2	21		4 1/2	22	7	2	7
	2 1/8	2	18	2	12		3 1/4	8	2	3	0		5 1/8	18	16	0	9
	2 3/8	2	8	1	21		3 3/8	6	14	2	0		5 3/8	15	10	3	6
	2 5/8	1	19	0	26		4 1/8	5	8	3	22		6 1/2	12	11	3	1
1	1 3/8	4	13	0	14	1 3/8	2 7/8	12	5	3	21	2 1/2	4 3/8	29	2	0	4
	2	3	19	1	11		3 1/4	10	9	2	7		5	24	15	3	19
	2 1/8	3	6	2	20		3 3/8	8	16	0	10		5 3/8	20	16	2	24
	2 3/8	2	15	0	11		4 1/8	7	5	2	3		6 1/2	17	4	1	15
	2 5/8	2	4	2	15		4 1/2	5	17	3	14		6 3/8	13	18	3	24
1 1/8	1 7/8	5	5	0	15	1 1/2	2 1/2	13	5	0	26	2 5/8	4 5/8	32	1	2	20
	2 1/8	4	9	2	9		3 1/8	11	5	3	26		5 1/8	27	6	3	0
	2 3/8	3	15	1	3		3 3/8	9	9	3	15		5 3/8	22	19	1	19
	2 5/8	3	2	0	23		4 1/8	7	16	3	20		6 1/8	18	19	2	23
	2 7/8	2	10	1	17		4 1/2	6	7	0	13		7 1/2	15	7	2	5

Table No. 11.

MAXIMUM PERMISSIBLE WIDTH OF ENLARGED LINKS, INCLUDING OVAL-SHAPED LINKS ON ENDS OF COLLAR SLINGS.

(Width of links to nearest sixteenth of an inch.)

Diameter of Iron of Short Link Chain, in Inches.	Diameter of Iron of Enlarged Link, in Inches.	Maximum permissible Inside Width of Enlarged Link, in Inches.	Diameter of Iron of Short Link Chain, in Inches.	Diameter of Iron of Enlarged Link, in Inches.	Maximum permissible Inside Width of Enlarged Link, in Inches.
$\frac{5}{16}$	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{1}{4}$	$1\frac{3}{16}$	$2\frac{5}{8}$
$\frac{3}{8}$	$\frac{7}{16}$	$1\frac{1}{16}$	1	$1\frac{1}{2}$	$2\frac{1}{8}$
	$\frac{9}{16}$	$1\frac{1}{8}$		$1\frac{5}{16}$	$3\frac{1}{4}$
$\frac{7}{16}$	$\frac{1}{2}$	$1\frac{1}{4}$		$1\frac{7}{16}$	$1\frac{11}{16}$
	$\frac{5}{8}$	$1\frac{3}{8}$		$1\frac{9}{16}$	$2\frac{1}{8}$
	$\frac{3}{4}$	$1\frac{5}{8}$		$1\frac{11}{16}$	$2\frac{3}{8}$
$\frac{9}{16}$	$\frac{7}{8}$	$1\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{13}{16}$	$3\frac{1}{8}$
	1	2		$1\frac{15}{16}$	$3\frac{3}{8}$
	$1\frac{1}{16}$	$1\frac{1}{2}$		$1\frac{17}{16}$	$3\frac{5}{8}$
$\frac{5}{8}$	$1\frac{1}{8}$	$1\frac{3}{4}$		$1\frac{19}{16}$	$3\frac{7}{8}$
	$1\frac{1}{4}$	$1\frac{5}{4}$		2	$4\frac{1}{8}$
	$1\frac{3}{8}$	$1\frac{7}{8}$	$1\frac{1}{4}$	$2\frac{1}{8}$	2
$\frac{11}{16}$	$1\frac{1}{2}$	2		$2\frac{1}{4}$	$2\frac{5}{8}$
	$1\frac{5}{8}$	$2\frac{1}{4}$		$2\frac{3}{8}$	$2\frac{3}{4}$
	$1\frac{3}{4}$	$2\frac{1}{2}$	$1\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$
$\frac{3}{4}$	$1\frac{7}{8}$	$2\frac{3}{4}$		$2\frac{7}{8}$	$3\frac{1}{8}$
	1	$2\frac{1}{2}$		$3\frac{1}{8}$	$3\frac{1}{4}$
	$1\frac{1}{8}$	$2\frac{3}{4}$		$3\frac{3}{8}$	$3\frac{3}{8}$
	$1\frac{1}{4}$	$2\frac{7}{8}$	$1\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{5}{8}$
$\frac{7}{8}$	$1\frac{1}{2}$	$3\frac{1}{8}$		$3\frac{7}{8}$	$4\frac{1}{8}$
	$1\frac{3}{4}$	$3\frac{3}{8}$		$4\frac{1}{4}$	$4\frac{1}{4}$
	$1\frac{5}{8}$	$3\frac{5}{8}$		$4\frac{3}{8}$	$4\frac{3}{8}$
	$1\frac{3}{4}$	$3\frac{7}{8}$		$4\frac{5}{8}$	$4\frac{5}{8}$
$\frac{15}{16}$	1	$4\frac{1}{8}$		$4\frac{7}{8}$	$4\frac{7}{8}$
	$1\frac{1}{8}$	$4\frac{1}{4}$		$4\frac{9}{8}$	$4\frac{9}{8}$
	$1\frac{1}{4}$	$4\frac{3}{4}$		$4\frac{11}{8}$	$4\frac{11}{8}$
	$1\frac{3}{8}$	$4\frac{7}{8}$		$4\frac{13}{8}$	$4\frac{13}{8}$
	$1\frac{1}{2}$	$5\frac{1}{8}$		$4\frac{15}{8}$	$4\frac{15}{8}$
	$1\frac{5}{8}$	$5\frac{3}{8}$		$4\frac{17}{8}$	$4\frac{17}{8}$
	$1\frac{3}{4}$	$5\frac{5}{8}$		$4\frac{19}{8}$	$4\frac{19}{8}$
	$1\frac{7}{8}$	$5\frac{7}{8}$		$4\frac{21}{8}$	$4\frac{21}{8}$
	1	$6\frac{1}{8}$		$4\frac{23}{8}$	$4\frac{23}{8}$
	$1\frac{1}{8}$	$6\frac{3}{8}$		$4\frac{25}{8}$	$4\frac{25}{8}$
	$1\frac{1}{4}$	$6\frac{5}{8}$		$4\frac{27}{8}$	$4\frac{27}{8}$
	$1\frac{3}{8}$	$6\frac{7}{8}$		$4\frac{29}{8}$	$4\frac{29}{8}$
	$1\frac{1}{2}$	$7\frac{1}{8}$		$4\frac{31}{8}$	$4\frac{31}{8}$
	$1\frac{5}{8}$	$7\frac{3}{8}$		$4\frac{33}{8}$	$4\frac{33}{8}$
	$1\frac{3}{4}$	$7\frac{5}{8}$		$4\frac{35}{8}$	$4\frac{35}{8}$
	$1\frac{7}{8}$	$7\frac{7}{8}$		$4\frac{37}{8}$	$4\frac{37}{8}$
	1	$8\frac{1}{8}$		$4\frac{39}{8}$	$4\frac{39}{8}$
	$1\frac{1}{8}$	$8\frac{3}{8}$		$4\frac{41}{8}$	$4\frac{41}{8}$
	$1\frac{1}{4}$	$8\frac{5}{8}$		$4\frac{43}{8}$	$4\frac{43}{8}$
	$1\frac{3}{8}$	$8\frac{7}{8}$		$4\frac{45}{8}$	$4\frac{45}{8}$
	$1\frac{1}{2}$	$9\frac{1}{8}$		$4\frac{47}{8}$	$4\frac{47}{8}$
	$1\frac{5}{8}$	$9\frac{3}{8}$		$4\frac{49}{8}$	$4\frac{49}{8}$
	$1\frac{3}{4}$	$9\frac{5}{8}$		$4\frac{51}{8}$	$4\frac{51}{8}$
	$1\frac{7}{8}$	$9\frac{7}{8}$		$4\frac{53}{8}$	$4\frac{53}{8}$
	1	$10\frac{1}{8}$		$4\frac{55}{8}$	$4\frac{55}{8}$
	$1\frac{1}{8}$	$10\frac{3}{8}$		$4\frac{57}{8}$	$4\frac{57}{8}$
	$1\frac{1}{4}$	$10\frac{5}{8}$		$4\frac{59}{8}$	$4\frac{59}{8}$
	$1\frac{3}{8}$	$10\frac{7}{8}$		$4\frac{61}{8}$	$4\frac{61}{8}$
	$1\frac{1}{2}$	$11\frac{1}{8}$		$4\frac{63}{8}$	$4\frac{63}{8}$
	$1\frac{5}{8}$	$11\frac{3}{8}$		$4\frac{65}{8}$	$4\frac{65}{8}$
	$1\frac{3}{4}$	$11\frac{5}{8}$		$4\frac{67}{8}$	$4\frac{67}{8}$
	$1\frac{7}{8}$	$11\frac{7}{8}$		$4\frac{69}{8}$	$4\frac{69}{8}$
	1	$12\frac{1}{8}$		$4\frac{71}{8}$	$4\frac{71}{8}$
	$1\frac{1}{8}$	$12\frac{3}{8}$		$4\frac{73}{8}$	$4\frac{73}{8}$
	$1\frac{1}{4}$	$12\frac{5}{8}$		$4\frac{75}{8}$	$4\frac{75}{8}$
	$1\frac{3}{8}$	$12\frac{7}{8}$		$4\frac{77}{8}$	$4\frac{77}{8}$
	$1\frac{1}{2}$	$13\frac{1}{8}$		$4\frac{79}{8}$	$4\frac{79}{8}$
	$1\frac{5}{8}$	$13\frac{3}{8}$		$4\frac{81}{8}$	$4\frac{81}{8}$
	$1\frac{3}{4}$	$13\frac{5}{8}$		$4\frac{83}{8}$	$4\frac{83}{8}$
	$1\frac{7}{8}$	$13\frac{7}{8}$		$4\frac{85}{8}$	$4\frac{85}{8}$
	1	$14\frac{1}{8}$		$4\frac{87}{8}$	$4\frac{87}{8}$
	$1\frac{1}{8}$	$14\frac{3}{8}$		$4\frac{89}{8}$	$4\frac{89}{8}$
	$1\frac{1}{4}$	$14\frac{5}{8}$		$4\frac{91}{8}$	$4\frac{91}{8}$
	$1\frac{3}{8}$	$14\frac{7}{8}$		$4\frac{93}{8}$	$4\frac{93}{8}$
	$1\frac{1}{2}$	$15\frac{1}{8}$		$4\frac{95}{8}$	$4\frac{95}{8}$
	$1\frac{5}{8}$	$15\frac{3}{8}$		$4\frac{97}{8}$	$4\frac{97}{8}$
	$1\frac{3}{4}$	$15\frac{5}{8}$		$4\frac{99}{8}$	$4\frac{99}{8}$
	$1\frac{7}{8}$	$15\frac{7}{8}$		$4\frac{101}{8}$	$4\frac{101}{8}$
	1	$16\frac{1}{8}$		$4\frac{103}{8}$	$4\frac{103}{8}$
	$1\frac{1}{8}$	$16\frac{3}{8}$		$4\frac{105}{8}$	$4\frac{105}{8}$
	$1\frac{1}{4}$	$16\frac{5}{8}$		$4\frac{107}{8}$	$4\frac{107}{8}$
	$1\frac{3}{8}$	$16\frac{7}{8}$		$4\frac{109}{8}$	$4\frac{109}{8}$
	$1\frac{1}{2}$	$17\frac{1}{8}$		$4\frac{111}{8}$	$4\frac{111}{8}$
	$1\frac{5}{8}$	$17\frac{3}{8}$		$4\frac{113}{8}$	$4\frac{113}{8}$
	$1\frac{3}{4}$	$17\frac{5}{8}$		$4\frac{115}{8}$	$4\frac{115}{8}$
	$1\frac{7}{8}$	$17\frac{7}{8}$		$4\frac{117}{8}$	$4\frac{117}{8}$
	1	$18\frac{1}{8}$		$4\frac{119}{8}$	$4\frac{119}{8}$
	$1\frac{1}{8}$	$18\frac{3}{8}$		$4\frac{121}{8}$	$4\frac{121}{8}$
	$1\frac{1}{4}$	$18\frac{5}{8}$		$4\frac{123}{8}$	$4\frac{123}{8}$
	$1\frac{3}{8}$	$18\frac{7}{8}$		$4\frac{125}{8}$	$4\frac{125}{8}$
	$1\frac{1}{2}$	$19\frac{1}{8}$		$4\frac{127}{8}$	$4\frac{127}{8}$
	$1\frac{5}{8}$	$19\frac{3}{8}$		$4\frac{129}{8}$	$4\frac{129}{8}$
	$1\frac{3}{4}$	$19\frac{5}{8}$		$4\frac{131}{8}$	$4\frac{131}{8}$
	$1\frac{7}{8}$	$19\frac{7}{8}$		$4\frac{133}{8}$	$4\frac{133}{8}$
	1	$20\frac{1}{8}$		$4\frac{135}{8}$	$4\frac{135}{8}$
	$1\frac{1}{8}$	$20\frac{3}{8}$		$4\frac{137}{8}$	$4\frac{137}{8}$
	$1\frac{1}{4}$	$20\frac{5}{8}$		$4\frac{139}{8}$	$4\frac{139}{8}$
	$1\frac{3}{8}$	$20\frac{7}{8}$		$4\frac{141}{8}$	$4\frac{141}{8}$
	$1\frac{1}{2}$	$21\frac{1}{8}$		$4\frac{143}{8}$	$4\frac{143}{8}$
	$1\frac{5}{8}$	$21\frac{3}{8}$		$4\frac{145}{8}$	$4\frac{145}{8}$
	$1\frac{3}{4}$	$21\frac{5}{8}$		$4\frac{147}{8}$	$4\frac{147}{8}$
	$1\frac{7}{8}$	$21\frac{7}{8}$		$4\frac{149}{8}$	$4\frac{149}{8}$
	1	$22\frac{1}{8}$		$4\frac{151}{8}$	$4\frac{151}{8}$
	$1\frac{1}{8}$	$22\frac{3}{8}$		$4\frac{153}{8}$	$4\frac{153}{8}$
	$1\frac{1}{4}$	$22\frac{5}{8}$		$4\frac{155}{8}$	$4\frac{155}{8}$
	$1\frac{3}{8}$	$22\frac{7}{8}$		$4\frac{157}{8}$	$4\frac{157}{8}$
	$1\frac{1}{2}$	$23\frac{1}{8}$		$4\frac{159}{8}$	$4\frac{159}{8}$
	$1\frac{5}{8}$	$23\frac{3}{8}$		$4\frac{161}{8}$	$4\frac{161}{8}$
	$1\frac{3}{4}$	$23\frac{5}{8}$		$4\frac{163}{8}$	$4\frac{163}{8}$
	$1\frac{7}{8}$	$23\frac{7}{8}$		$4\frac{165}{8}$	$4\frac{165}{8}$
	1	$24\frac{1}{8}$		$4\frac{167}{8}$	$4\frac{167}{8}$
	$1\frac{1}{8}$	$24\frac{3}{8}$		$4\frac{169}{8}$	$4\frac{169}{8}$
	$1\frac{1}{4}$	$24\frac{5}{8}$		$4\frac{171}{8}$	$4\frac{171}{8}$
	$1\frac{3}{8}$	$24\frac{7}{8}$		$4\frac{173}{8}$	$4\frac{173}{8}$
	$1\frac{1}{2}$	$25\frac{1}{8}$		$4\frac{175}{8}$	$4\frac{175}{8}$
	$1\frac{5}{8}$	$25\frac{3}{8}$		$4\frac{177}{8}$	$4\frac{177}{8}$
	$1\frac{3}{4}$	$25\frac{5}{8}$		$4\frac{179}{8}$	$4\frac{179}{8}$
	$1\frac{7}{8}$	$25\frac{7}{8}$		$4\frac{181}{8}$	$4\frac{181}{8}$
	1	$26\frac{1}{8}$		$4\frac{183}{8}$	$4\frac{183}{8}$
	$1\frac{1}{8}$	$26\frac{3}{8}$		$4\frac{185}{8}$	$4\frac{185}{8}$
	$1\frac{1}{4}$	$26\frac{5}{8}$		$4\frac{187}{8}$	$4\frac{187}{8}$
	$1\frac{3}{8}$	$26\frac{7}{8}$		$4\frac{189}{8}$	$4\frac{189}{8}$
	$1\frac{1}{2}$	$27\frac{1}{8}$		$4\frac{191}{8}$	$4\frac{191}{8}$
	$1\frac{5}{8}$	$27\frac{3}{8}$		$4\frac{193}{8}$	$4\frac{193}{8}$
	$1\frac{3}{4}$	$27\frac{5}{8}$		$4\frac{195}{8}$	$4\frac{195}{8}$
	$1\frac{7}{8}$	$27\frac{7}{8}$		$4\frac{197}{8}$	$4\frac{197}{8}$
	1	$28\frac{1}{8}$		$4\frac{199}{8}$	$4\frac{199}{8}$
	$1\frac{1}{8}$	$28\frac{3}{8}$		$4\frac{201}{8}$	$4\frac{201}{8}$
	$1\frac{1}{4}$	$28\frac{5}{8}$		$4\frac{203}{8}$	$4\frac{203}{8}$
	$1\frac{3}{8}$	$28\frac{7}{8}$		$4\frac{205}{8}$	$4\frac{205}{8}$
	$1\frac{1}{2}$	$29\frac{1}{8}$		$4\frac{207}{8}$	$4\frac{207}{8}$
	$1\frac{5}{8}$	$29\frac{3}{8}$		$4\frac{209}{8}$	$4\frac{209}{8}$
	$1\frac{3}{4}$	$29\frac{5}{8}$		$4\frac{211}{8}$	$4\frac{211}{8}$
	$1\frac{7}{8}$	$29\frac{7}{8}$		$4\frac{213}{8}$	$4\frac{213}{8}$
	1	$30\frac{1}{8}$		$4\frac{215}{8}$	$4\frac{215}{8}$
	$1\frac{1}{8}$	$30\frac{3}{8}$		$4\frac{217}{8}$	$4\frac{217}{8}$
	$1\frac{1}{4}$	$30\frac{5}{8}$		$4\frac{219}{8}$	$4\frac{219}{8}$
	$1\frac{3}{8}$	$30\frac{7}{8}$		$4\frac{221}{8}$	$4\frac{221}{8}$
	$1\frac{1}{2}$	$31\frac{1}{8}$		$4\frac{223}{8}$	$4\frac{223}{8}$
	$1\frac{5}{8}$	$31\frac{3}{8}$		$4\frac{225}{8}$	$4\frac{225}{8}$
	$1\frac{3}{4}$	$31\frac{5}{8}$		$4\frac{227}{8}$	$4\frac{227}{8}$
	$1\frac{7}{8}$	$31\frac{7}{8}$		$4\frac{229}{8}$	$4\frac{229}{8}$
	1	$32\frac{1}{8}$		$4\frac{231}{8}$	$4\frac{2$

Table No. 12.

MAXIMUM PERMISSIBLE DIAMETER OF IRON RINGS FOR SHORT-LINK CHAIN.

(Diameter of rings to nearest eighth of an inch.)

Diameter of Chain, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring, in Inches.	Diameter of Chain, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring, in Inches.	Diameter of Chain, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring, in Inches.
1/2	3/8	1	1/2	1 1/8	2 7/8	1	1 1/8	4 1/8
5/16	7/16	1 1/8	5/16	1 1/8	3 1/8	1 1/16	1 1/8	5
3/8	1 1/16	1 3/8	3/8	1 1/8	3 3/8	1 1/8	1 1/8	5 1/2
7/16	1 1/8	1 7/8	7/16	1 1/8	3 7/8	1 1/8	1 1/8	6
1/2	1 1/4	2	1/2	1 1/8	4	1 1/8	1 1/8	6 1/2
5/8	1 3/8	2 1/8	5/8	1 1/8	4 1/8	1 1/8	1 1/8	7
3/4	1 5/8	2 3/8	3/4	1 1/8	4 3/8	1 1/8	1 1/8	7 1/2
7/8	1 7/8	2 5/8	7/8	1 1/8	4 5/8	1 1/8	1 1/8	8
1	2	3	1	1 1/8	5	1 1/8	1 1/8	8 1/2
1 1/16	2 1/16	3 1/8	1 1/16	1 1/8	5 1/8	1 1/8	1 1/8	9
1 1/8	2 1/8	3 1/4	1 1/8	1 1/8	5 1/4	1 1/8	1 1/8	9 1/2
1 1/4	2 1/4	3 3/8	1 1/4	1 1/8	5 3/8	1 1/8	1 1/8	10
1 1/2	2 1/2	3 1/2	1 1/2	1 1/8	5 1/2	1 1/8	1 1/8	10 1/2
1 5/8	2 5/8	3 5/8	1 5/8	1 1/8	5 5/8	1 1/8	1 1/8	11
1 7/8	2 7/8	4	1 7/8	1 1/8	6	1 1/8	1 1/8	11 1/2
2	3	4 1/8	2	1 1/8	6 1/8	1 1/8	1 1/8	12
2 1/16	3 1/16	4 1/4	2 1/16	1 1/8	6 1/4	1 1/8	1 1/8	12 1/2
2 1/8	3 1/8	4 1/2	2 1/8	1 1/8	6 1/2	1 1/8	1 1/8	13
2 1/4	3 1/4	4 3/4	2 1/4	1 1/8	6 3/4	1 1/8	1 1/8	13 1/2
2 3/8	3 3/8	4 7/8	2 3/8	1 1/8	6 7/8	1 1/8	1 1/8	14
2 1/2	3 1/2	5	2 1/2	1 1/8	7	1 1/8	1 1/8	14 1/2
2 5/8	3 5/8	5 1/8	2 5/8	1 1/8	7 1/8	1 1/8	1 1/8	15
2 3/4	3 3/4	5 1/4	2 3/4	1 1/8	7 3/4	1 1/8	1 1/8	15 1/2
2 7/8	3 7/8	5 3/4	2 7/8	1 1/8	7 7/8	1 1/8	1 1/8	16
3	4	6	3	1 1/8	8	1 1/8	1 1/8	16 1/2
3 1/16	4 1/16	6 1/8	3 1/16	1 1/8	8 1/8	1 1/8	1 1/8	17
3 1/8	4 1/8	6 1/4	3 1/8	1 1/8	8 1/4	1 1/8	1 1/8	17 1/2
3 1/4	4 1/4	6 3/8	3 1/4	1 1/8	8 3/8	1 1/8	1 1/8	18
3 3/8	4 3/8	6 3/4	3 3/8	1 1/8	8 3/4	1 1/8	1 1/8	18 1/2
3 1/2	4 1/2	7	3 1/2	1 1/8	9	1 1/8	1 1/8	19
3 5/8	4 5/8	7 1/8	3 5/8	1 1/8	9 1/8	1 1/8	1 1/8	19 1/2
3 3/4	4 3/4	7 1/4	3 3/4	1 1/8	9 3/4	1 1/8	1 1/8	20
3 7/8	4 7/8	7 3/4	3 7/8	1 1/8	9 7/8	1 1/8	1 1/8	20 1/2
4	5	8	4	1 1/8	10	1 1/8	1 1/8	21

Table No. 13.

MAXIMUM PERMISSIBLE DIAMETER OF IRON RINGS FOR TWO-LEGGED CHAIN SLINGS.

(Diameter to nearest eighth of an inch.)

Diameter of Chain Iron of Sling, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring.	Diameter of Chain Iron of Sling, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring.	Diameter of Chain Iron of Sling, in Inches.	Diameter of Iron of Ring, in Inches.	Maximum permissible Inside Diameter of Ring.
1/2	5/8	2 3/8	1/2	1 1/8	5 1/2	1/2	1 7/8	4 1/2
5/16	1 1/16	3 1/8	5/16	1 1/8	6 1/8	5/16	1 1/2	5 1/4
3/8	1 1/8	3 3/4	3/8	1 1/8	6 3/8	3/8	1 1/8	6
7/16	1 1/4	4 1/8	7/16	1 1/8	6 5/8	7/16	1 1/8	6 1/2
1/2	1 3/8	4 3/4	1/2	1 1/8	6 7/8	1/2	1 1/8	7
5/8	1 5/8	5 1/8	5/8	1 1/8	7 1/8	5/8	1 1/8	7 1/2
3/4	1 7/8	5 3/4	3/4	1 1/8	7 3/8	3/4	1 1/8	8
7/8	2	6 1/8	7/8	1 1/8	7 5/8	7/8	1 1/8	8 1/2
1	2 1/8	6 3/4	1	1 1/8	7 7/8	1	1 1/8	9
1 1/16	2 1/16	6 7/8	1 1/16	1 1/8	8 1/16	1 1/16	1 1/8	9 1/2
1 1/8	2 1/8	7	1 1/8	1 1/8	8 1/8	1 1/8	1 1/8	10
1 1/4	2 1/4	7 1/4	1 1/4	1 1/8	8 1/4	1 1/4	1 1/8	10 1/2
1 1/2	2 1/2	7 1/2	1 1/2	1 1/8	8 1/2	1 1/2	1 1/8	11
1 3/4	2 3/4	7 3/4	1 3/4	1 1/8	8 3/4	1 3/4	1 1/8	11 1/2
1 5/8	2 5/8	8	1 5/8	1 1/8	8 5/8	1 5/8	1 1/8	12
1 7/8	2 7/8	8 1/4	1 7/8	1 1/8	8 7/8	1 7/8	1 1/8	12 1/2
2	3	8 1/2	2	1 1/8	9	2	1 1/8	13
2 1/16	3 1/16	8 3/4	2 1/16	1 1/8	9 1/16	2 1/16	1 1/8	13 1/2
2 1/8	3 1/8	8 7/8	2 1/8	1 1/8	9 1/8	2 1/8	1 1/8	14
2 1/4	3 1/4	9	2 1/4	1 1/8	9 1/4	2 1/4	1 1/8	14 1/2
2 3/8	3 3/8	9 1/4	2 3/8	1 1/8	9 3/8	2 3/8	1 1/8	15
2 1/2	3 1/2	9 1/2	2 1/2	1 1/8	9 1/2	2 1/2	1 1/8	15 1/2
2 5/8	3 5/8	9 3/4	2 5/8	1 1/8	9 3/4	2 5/8	1 1/8	16
2 3/4	3 3/4	10	2 3/4	1 1/8	9 3/4	2 3/4	1 1/8	16 1/2
2 7/8	3 7/8	10 1/4	2 7/8	1 1/8	9 7/8	2 7/8	1 1/8	17
3	4	10 1/2	3	1 1/8	10	3	1 1/8	17 1/2
3 1/16	4 1/16	10 3/4	3 1/16	1 1/8	10 1/16	3 1/16	1 1/8	18
3 1/8	4 1/8	11	3 1/8	1 1/8	10 1/8	3 1/8	1 1/8	18 1/2
3 1/4	4 1/4	11 1/4	3 1/4	1 1/8	10 1/4	3 1/4	1 1/8	19
3 3/8	4 3/8	11 1/2	3 3/8	1 1/8	10 3/8	3 3/8	1 1/8	19 1/2
3 1/2	4 1/2	11 3/4	3 1/2	1 1/8	10 1/2	3 1/2	1 1/8	20
3 5/8	4 5/8	12	3 5/8	1 1/8	10 5/8	3 5/8	1 1/8	20 1/2
3 3/4	4 3/4	12 1/4	3 3/4	1 1/8	10 3/4	3 3/4	1 1/8	21
3 7/8	4 7/8	12 1/2	3 7/8	1 1/8	10 7/8	3 7/8	1 1/8	21 1/2
4	5	12 3/4	4	1 1/8	11	4	1 1/8	22

Table No. 14.—Shackle-iron.

TABLE OF SAFE-WORKING LOADS FOR SHACKLE-IRON.

(The safe-working load for any shackle is the safe-working load of the iron, or of the pin, whichever is less. (See Table No. 15 and Diagrams Nos. 20 and 21.) The safe-working load for the iron of a shackle having an intermediate gap may be obtained from Table No. 16 or from Diagrams No. 20 and 21.)

Diameter of Shackle-iron, in Inches.	Width of Gap, in Inches.	Working-load in Tons, &c.	Working-load, in Pounds.	Width of Gap, in Inches.	Working-load, in Tons, &c.	Working-load in Pounds.
$\frac{3}{8}$	$\frac{7}{16}$	T. cwt. qr. lb.	1,553	$\frac{7}{8}$	T. cwt. qr. lb.	776
$\frac{7}{16}$	$\frac{9}{16}$	0 13 3 13	1,918	$1\frac{1}{8}$	0 6 3 20	959
$\frac{1}{2}$	$\frac{11}{16}$	1 3 0 14	2,577	$1\frac{1}{4}$	0 8 2 7	1,288
$\frac{9}{16}$	$\frac{13}{16}$	1 9 3 3	3,335	$1\frac{3}{8}$	0 11 2 0	1,668
$\frac{5}{8}$	$\frac{1}{2}$	1 17 1 22	4,194	$1\frac{1}{2}$	0 14 3 16	2,097
$\frac{11}{16}$	$\frac{7}{8}$	2 2 2 25	4,785	$1\frac{3}{4}$	1 1 1 12	2,392
$\frac{3}{4}$	$\frac{15}{16}$	2 11 3 2	5,798	$1\frac{7}{8}$	1 5 3 15	2,899
$\frac{13}{16}$	1	3 1 2 22	6,910	2	1 10 3 11	3,455
$\frac{7}{8}$	$1\frac{1}{16}$	3 12 2 3	8,123	$2\frac{1}{8}$	1 16 1 2	4,062
$\frac{15}{16}$	$1\frac{1}{8}$	3 19 3 7	8,939	$2\frac{3}{8}$	1 19 3 18	4,470
1	$1\frac{1}{4}$	4 12 0 3	10,307	$2\frac{1}{2}$	2 6 0 1	5,153
$1\frac{1}{8}$	$1\frac{3}{8}$	5 19 0 13	13,341	$2\frac{3}{4}$	2 19 2 6	6,670
$1\frac{1}{4}$	$1\frac{1}{2}$	7 3 3 4	16,104	$3\frac{1}{8}$	3 11 3 16	8,052
$1\frac{3}{8}$	$1\frac{5}{8}$	8 17 0 23	19,847	$3\frac{3}{8}$	4 8 2 11	9,923
$1\frac{1}{2}$	$1\frac{3}{4}$	10 7 0 6	23,190	$3\frac{1}{2}$	5 3 2 3	11,595
$1\frac{5}{8}$	2	12 6 3 5	27,641	4	6 3 1 17	13,821
$1\frac{3}{4}$	$2\frac{1}{8}$	14 1 3 8	31,564	$4\frac{3}{8}$	7 0 3 18	15,782
2	$2\frac{1}{4}$	16 7 3 16	36,724	$4\frac{1}{2}$	8 3 3 22	18,362
$2\frac{1}{8}$	$2\frac{3}{8}$	18 8 0 11	41,227	5	9 4 0 5	20,613
$2\frac{1}{4}$	$2\frac{5}{8}$	21 0 1 27	47,095	$5\frac{1}{4}$	10 10 1 0	23,548
$2\frac{3}{8}$	$2\frac{7}{8}$	23 5 3 13	52,177	$5\frac{3}{8}$	11 12 3 21	26,089
$2\frac{1}{2}$	$2\frac{9}{8}$	26 4 2 10	58,754	$5\frac{7}{8}$	13 2 1 5	29,377
$2\frac{3}{4}$	3	28 15 0 17	64,417	$6\frac{1}{4}$	14 7 2 8	32,208

Table No. 15.—Shackle-pins.

TABLE OF SAFE-WORKING LOADS FOR THE PINS OF SHACKLES.

(The safe-working load for any shackle is the safe-working load of the pin, or of the iron of the shackle, whichever is less. (See Table No. 14 and Diagrams Nos. 20 and 21.) The safe-working load for a pin in a shackle of an intermediate gap may be obtained from Table 16 or from Diagrams 20 and 21.)

Diameter of Pin, in Inches.	Width of Gap equal to Diameter of Pin.			Width of Gap twice the Diameter of Pin.		
	Width of Gap, in Inches.	Working-load, in Tons, &c.	Working-load, in Pounds.	Width of Gap, in Inches.	Working-load, in Tons, &c.	Working-load, in Pounds.
$\frac{3}{8}$	$\frac{3}{8}$	T. cwt. qr. lb.	1,047	$\frac{3}{4}$	T. cwt. qr. lb.	524
$\frac{7}{16}$	$\frac{7}{16}$	0 9 1 11	1,426	$\frac{7}{8}$	0 4 2 20	713
$\frac{1}{2}$	$\frac{1}{2}$	0 12 2 26	1,864	1	0 6 1 13	932
$\frac{9}{16}$	$\frac{9}{16}$	0 16 2 16	2,358	$1\frac{1}{8}$	0 8 1 8	1,179
$\frac{5}{8}$	$\frac{5}{8}$	1 1 0 6	2,912	$1\frac{1}{4}$	0 10 2 3	1,456
$\frac{11}{16}$	$\frac{11}{16}$	1 6 0 0	3,524	$1\frac{3}{8}$	0 13 0 0	1,762
$\frac{3}{4}$	$\frac{3}{4}$	1 11 1 24	4,194	$1\frac{1}{2}$	0 15 2 26	2,097
$\frac{13}{16}$	$\frac{13}{16}$	1 17 1 22	4,922	$1\frac{3}{4}$	0 18 2 25	2,461
$\frac{7}{8}$	$\frac{7}{8}$	2 3 3 22	5,708	$1\frac{7}{8}$	1 1 3 25	2,854
$\frac{15}{16}$	$\frac{15}{16}$	2 10 3 24	6,553	2	1 5 1 26	3,276
1	1	2 18 2 1	7,456	$2\frac{1}{8}$	1 9 1 0	3,723
$1\frac{1}{8}$	$1\frac{1}{8}$	3 6 2 8	9,436	$2\frac{1}{4}$	1 13 1 4	4,718
$1\frac{1}{4}$	$1\frac{1}{4}$	4 4 1 0	11,650	$2\frac{3}{8}$	2 2 0 14	5,825
$1\frac{3}{8}$	$1\frac{3}{8}$	5 4 0 2	14,096	$2\frac{1}{2}$	2 12 0 1	7,048
$1\frac{1}{2}$	$1\frac{1}{2}$	6 5 3 12	16,776	3	3 2 3 20	8,388
$1\frac{5}{8}$	$1\frac{5}{8}$	7 9 3 4	19,688	$3\frac{1}{4}$	3 14 3 16	9,844
$1\frac{3}{4}$	$1\frac{3}{4}$	8 15 3 4	22,833	$3\frac{3}{8}$	4 7 3 16	11,416
$1\frac{7}{8}$	$1\frac{7}{8}$	10 3 3 13	26,212	$3\frac{1}{2}$	5 1 3 20	13,106
2	2	11 14 0 4	29,824	$3\frac{3}{4}$	5 17 0 2	14,912
$2\frac{1}{8}$	$2\frac{1}{8}$	13 6 1 4	33,668	4	6 13 0 16	16,834
$2\frac{1}{4}$	$2\frac{1}{4}$	15 0 2 12	37,746	$4\frac{1}{4}$	7 10 1 6	18,873
$2\frac{3}{8}$	$2\frac{3}{8}$	16 17 0 2	42,056	$4\frac{3}{8}$	8 8 2 1	21,023
$2\frac{1}{2}$	$2\frac{1}{2}$	18 15 2 0	46,600	$4\frac{1}{2}$	9 7 3 0	23,300
		20 16 0 8		5	10 8 0 4	

Table 16.—To find Safe-working Load of Shackles and Rings.

Diameter.	Shackle.		Ring.	Diameter.	Shackle.		Ring.
	Iron.	Pin.			Iron.	Pin.	
In. $\frac{3}{8}$	C. 2.43	C. 1.4	C. 3.55	In. $1\frac{1}{2}$	C. 155.30	C. 89.87	C. 227.2
$\frac{1}{2}$	5.75	3.33	8.41	$1\frac{9}{16}$	175.54	101.59	256.83
$\frac{9}{16}$	8.19	4.74	11.79	$1\frac{5}{8}$	197.45	114.26	288.87
$\frac{5}{8}$	11.23	6.0	16.43	$1\frac{11}{16}$	221.1	127.95	323.47
$\frac{11}{16}$	14.95	8.65	21.88	$1\frac{3}{4}$	246.58	142.7	360.76
$\frac{3}{4}$	19.41	11.23	28.40	$1\frac{13}{16}$	273.96	158.55	400.82
$\frac{13}{16}$	24.68	14.28	36.11	$1\frac{7}{8}$	303.32	175.54	443.77
$\frac{7}{8}$	30.82	17.84	45.1	$1\frac{15}{16}$	334.65	193.67	489.62
$\frac{15}{16}$	37.92	21.94	55.47	2	368.11	213.03	538.56
1	46.01	26.63	67.32	$2\frac{1}{8}$	441.53	255.52	645.98
$1\frac{1}{16}$	55.17	31.93	80.72	$2\frac{1}{4}$	524.12	303.32	766.82
$1\frac{1}{8}$	65.52	37.92	95.86	$2\frac{3}{8}$	616.42	356.73	901.85
$1\frac{3}{16}$	77.07	44.6	112.76	$2\frac{1}{2}$	718.96	416.08	1,051.9
$1\frac{1}{4}$	89.86	52.01	131.47	$2\frac{5}{8}$	832.1	481.66	1,217.7
$1\frac{5}{16}$	104.04	60.21	152.21	$2\frac{3}{4}$	956.94	553.8	1,400.1
$1\frac{3}{8}$	119.64	69.23	175.03	$2\frac{7}{8}$	1,092.2	632.05	1,597.8
$1\frac{7}{16}$	136.66	79.09	199.94	3	1,242.4	718.98	1,817.7

S.W.L. of shackle =  $\frac{C}{8W}$ . W = Width of gap in inches.

S.W.L. of ring =  $\frac{C}{8D_1}$ . D<sub>1</sub> = Mean diameter of ring in inches.

NOTE.—S.W.L. of shackle is obtained from iron or pin constant, whichever is least.  
 Example.—Shackle: Iron,  $1\frac{1}{2}$  in.; pin,  $1\frac{5}{8}$  in.; gap,  $2\frac{1}{2}$  in.

C for iron = 65.52; C for pin = 60.21 ∴ S.W.L. =  $\frac{60.21}{20}$  = 3.01 tons.

Example.—Ring: Iron, 1 in.; inside diameter = 4 in. ∴ Mean diameter = 5 in

S.W.L. =  $\frac{67.32}{40}$  = 1.683 tons.

For S.W.L. of bow shackles, see Table 17.

Table 17.—Safe Working Load of Bow Shackles.

Diameter of Iron.	Inside Width of Bow.																			
	In. $\frac{1}{8}$	In. $\frac{1}{4}$	In. $\frac{3}{8}$	In. $\frac{1}{2}$	In. $\frac{5}{8}$	In. $\frac{3}{4}$	In. $\frac{7}{8}$	In. $1$	In. $1\frac{1}{8}$	In. $1\frac{1}{4}$	In. $1\frac{1}{2}$	In. $1\frac{3}{4}$	In. $1\frac{7}{8}$	In. $2$	In. $2\frac{1}{8}$	In. $2\frac{1}{4}$	In. $2\frac{1}{2}$	In. $2\frac{3}{4}$	In. $3$	
$\frac{3}{8}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{2}$
$\frac{7}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$
$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$
$1\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$
$1\frac{1}{2}$	$\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$
$1\frac{3}{4}$	$1$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$
$1\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$	$5\frac{1}{2}$
$2$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$	$5\frac{1}{2}$	$5\frac{3}{4}$
$2\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$	$5\frac{1}{2}$	$5\frac{3}{4}$	$6$
$2\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$	$5\frac{1}{2}$	$5\frac{3}{4}$	$6$	$6\frac{1}{2}$
$2\frac{1}{2}$	$1\frac{7}{8}$	$2$	$2\frac{1}{8}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$4$	$4\frac{1}{2}$	$4\frac{3}{4}$	$5$	$5\frac{1}{2}$	$5\frac{3}{4}$	$6$	$6\frac{1}{2}$	$6\frac{3}{4}$

Table 17.—Safe Working Load of Bow Shackles—continued.

Diameter of Iron.	Safe Working Load.																			
	T. C. 0 13	T. C. 0 13	T. C. 0 12	T. C. 0 12	T. C. 0 12	T. C. 0 11	T. C. 0 11	T. C. 0 11	T. C. 0 11	T. C. 0 11	T. C. 0 10	T. C. 0 10	T. C. 0 10	T. C. 0 10	T. C. 0 9	T. C. 0 9	T. C. 0 9	T. C. 0 8	T. C. 0 8	In. $\frac{3}{8}$
$\frac{3}{8}$	0 13	0 13	0 12	0 12	0 12	0 11	0 11	0 11	0 11	0 11	0 10	0 10	0 10	0 10	0 9	0 9	0 9	0 8	0 8	$\frac{3}{8}$
$\frac{7}{8}$	0 18	0 17	0 17	0 16	0 16	0 16	0 15	0 15	0 15	0 14	0 14	0 14	0 13	0 13	0 13	0 12	0 12	0 12	0 11	$\frac{7}{8}$
$1\frac{1}{8}$	1 3	1 3	1 2	1 2	1 1	1 1	1 0	1 0	1 0	0 19	0 19	0 18	0 18	0 17	0 17	0 16	0 15	0 15	0 15	$1\frac{1}{8}$
$1\frac{1}{4}$	1 9	1 9	1 8	1 8	1 7	1 7	1 6	1 5	1 4	1 4	1 4	1 3	1 2	1 2	1 1	1 1	1 0	1 0	0 19	$1\frac{1}{4}$
$1\frac{1}{2}$	1 16	1 15	1 15	1 14	1 13	1 12	1 12	1 11	1 10	1 10	1 9	1 8	1 7	1 7	1 6	1 5	1 4	1 4	1 3	$1\frac{1}{2}$
$1\frac{3}{4}$	2 3	2 2	2 2	2 1	2 0	1 19	1 18	1 17	1 16	1 16	1 15	1 14	1 13	1 12	1 11	1 10	1 9	1 9	1 8	$1\frac{3}{4}$
$1\frac{7}{8}$	2 12	2 11	2 10	2 8	2 7	2 6	2 6	2 4	2 3	2 2	2 1	2 0	1 19	1 18	1 17	1 16	1 15	1 14	1 13	$1\frac{7}{8}$
$2$	3 1	3 0	2 19	2 17	2 16	2 15	2 14	2 12	2 11	2 10	2 9	2 8	2 6	2 5	2 4	2 3	2 1	2 0	1 19	$2$
$2\frac{1}{8}$	3 11	3 10	3 8	3 7	3 6	3 4	3 2	3 1	3 0	2 18	2 17	2 15	2 14	2 12	2 11	2 10	2 8	2 7	2 6	$2\frac{1}{8}$
$2\frac{1}{4}$	4 1	4 0	3 18	3 16	3 15	3 13	3 12	3 10	3 8	3 6	3 5	3 3	3 2	3 0	2 18	2 17	2 15	2 14	2 12	$2\frac{1}{4}$
$2\frac{1}{2}$	4 12	4 11	4 9	4 7	4 5	4 3	4 1	4 0	3 18	3 16	3 14	3 12	3 10	3 8	3 6	3 5	3 3	3 1	2 19	$2\frac{1}{2}$
$2\frac{3}{4}$	5 17	5 15	5 13	5 10	5 8	5 6	5 3	5 1	4 19	4 16	4 14	4 12	4 9	4 7	4 4	4 2	4 0	3 17	3 15	$2\frac{3}{4}$
$3$	7 4	7 1	6 18	6 15	6 13	6 10	6 7	6 4	6 1	5 18	5 15	5 12	5 9	5 6	5 3	5 1	4 18	4 15	4 12	$3$
$3\frac{1}{8}$	8 14	8 11	8 8	8 4	8 1	7 17	7 14	7 11	7 7	7 3	7 0	6 16	6 12	6 9	6 5	6 2	5 18	5 15	5 11	$3\frac{1}{8}$
$3\frac{1}{4}$	10 7	10 4	10 0	9 15	9 11	9 7	9 3	8 19	8 15	8 11	8 7	8 2	7 17	7 13	7 9	7 5	7 1	6 17	6 13	$3\frac{1}{4}$
$3\frac{1}{2}$	12 2	11 19	11 14	11 9	11 4	11 0	10 15	10 10	10 5	10 0	9 15	9 10	9 5	9 0	8 15	8 10	8 5	8 0	7 16	$3\frac{1}{2}$
$3\frac{3}{4}$	14 1	13 17	13 12	13 6	13 0	12 14	12 9	12 4	11 18	11 12	11 6	11 0	10 14	10 8	10 3	9 18	9 12	9 6	9 1	$3\frac{3}{4}$
$4$	16 4	15 19	15 12	15 5	14 18	14 12	14 6	14 0	13 13	13 6	13 0	12 13	12 6	12 0	11 14	11 8	11 2	10 15	10 9	$4$
$4\frac{1}{8}$	18 8	18 2	17 15	17 7	17 0	16 13	16 6	15 18	15 10	15 3	14 16	14 8	14 0	13 13	13 6	12 18	12 10	12 3	11 16	$4\frac{1}{8}$

With the diameter of the iron and the inside width of the bow in the top half of the table the S.W.L. can be found in the lower half of the table in the corresponding column. Example: Bow shackle  $1\frac{1}{2}$  in. iron,  $4\frac{1}{4}$  in. inside width of bow. The load given in the lower half of the table in the column for width and that for diameter or iron is 8 tons 15 cwt. The safe-working load for the iron should be found as for a straight shackle, and the S.W.L. of the complete shackle is the lesser of the two loads so found.

Table 18.—Safe-working Load of Swivels.

Nominal Size of S.L. Chain.	Safe-Working Load.	Swivel, see Diagram 18.			Equivalent Wire Rope. (Galvanized.)		
		A.	B and C.	D and E.	<sup>6</sup> / <sub>12</sub>	<sup>6</sup> / <sub>24</sub>	<sup>6</sup> / <sub>30</sub>
In. $\frac{1}{4}$	T. cwt. qr. lb. 0 6 3 0	In. $\frac{5}{16}$	In. $\frac{3}{8}$	In. $\frac{3}{8}$	In. $1\frac{1}{4}$	In. 1	In. 1
$\frac{5}{16}$	0 10 2 5	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{4}$
$\frac{3}{8}$	0 15 0 21	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{9}{16}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$
$\frac{7}{16}$	1 0 2 19	$\frac{9}{16}$	$\frac{11}{16}$	$\frac{11}{16}$	2	$1\frac{3}{4}$	$1\frac{3}{4}$
$\frac{1}{2}$	1 7 0 0	$\frac{5}{8}$	$\frac{13}{16}$	$\frac{3}{4}$	$2\frac{1}{4}$	2	2
$\frac{9}{16}$	1 14 0 19	$\frac{11}{16}$	$\frac{15}{16}$	$\frac{7}{8}$	$2\frac{1}{2}$	$2\frac{1}{4}$	$2\frac{1}{4}$
$\frac{5}{8}$	2 2 0 21	$\frac{13}{16}$	1	$\frac{15}{16}$	$2\frac{3}{4}$	$2\frac{1}{2}$	$2\frac{1}{2}$
$\frac{11}{16}$	2 11 0 5	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{16}$	3	$2\frac{1}{2}$	$2\frac{1}{2}$
$\frac{3}{4}$	3 0 3 0	$\frac{15}{16}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$3\frac{1}{4}$	$2\frac{3}{4}$	3
$\frac{13}{16}$	3 11 1 5	1	$1\frac{5}{16}$	$1\frac{1}{4}$	$3\frac{1}{2}$	3	$3\frac{1}{4}$
$\frac{7}{8}$	4 2 2 21	$1\frac{1}{8}$	$1\frac{7}{16}$	$1\frac{5}{16}$	$3\frac{3}{4}$	$3\frac{1}{2}$	$3\frac{1}{2}$
$\frac{15}{16}$	4 14 3 19	$1\frac{3}{16}$	$1\frac{1}{2}$	$1\frac{7}{16}$	4	$3\frac{1}{2}$	$3\frac{3}{4}$
1	5 8 0 0	$1\frac{1}{4}$	$1\frac{5}{8}$	$1\frac{1}{2}$	$4\frac{1}{2}$	$3\frac{3}{4}$	4
$1\frac{1}{16}$	6 1 3 19	$1\frac{5}{16}$	$1\frac{3}{4}$	$1\frac{3}{8}$	$4\frac{1}{2}$	4	$4\frac{1}{4}$
$\frac{1}{8}$	6 16 2 21	$1\frac{7}{16}$	$1\frac{13}{16}$	$1\frac{11}{16}$	5	$4\frac{1}{4}$	$4\frac{1}{2}$
$\frac{3}{16}$	7 12 1 5	$1\frac{1}{2}$	$1\frac{15}{16}$	$1\frac{13}{16}$	..	$4\frac{1}{2}$	$4\frac{3}{4}$
$\frac{1}{4}$	8 8 3 0	$1\frac{9}{16}$	$2\frac{1}{16}$	$1\frac{1}{2}$	..	$4\frac{1}{2}$	5
$\frac{5}{16}$	9 6 0 5	$1\frac{5}{8}$	$2\frac{1}{8}$	2	..	5	$5\frac{1}{4}$
$\frac{3}{8}$	10 4 0 21	$1\frac{3}{4}$	$2\frac{1}{4}$	$2\frac{1}{16}$	..	$5\frac{1}{4}$	$5\frac{1}{2}$
$\frac{7}{16}$	11 3 0 19	$1\frac{11}{16}$	$2\frac{3}{8}$	$2\frac{3}{16}$	..	$5\frac{1}{2}$	$5\frac{3}{4}$
$\frac{1}{2}$	12 3 0 0	$1\frac{7}{8}$	$2\frac{7}{16}$	$2\frac{1}{4}$	..	$5\frac{3}{4}$	6

Table No. 19.—Black-steel-wire Ropes.

TABLE OF BREAKING-LOADS AND CORRESPONDING WORKING-LOADS FOR BLACK-STEEL-WIRE ROPES OF SPECIAL IMPROVED PATENT STEEL QUALITY USED FOR SINGLE WHIPS, SINGLE STROPS, OR LONG-EYED SNOTTERS AND FOR OTHER SIMILAR CASES WHERE THE LOAD IS CARRIED ON A SINGLE PART.

(Tensile strength of wires, 90/100 tons per square inch.)

Size of Rope.		Construction.—Six Strands of 19 Wires each.			Construction.—Six Strands of 24 Wires each.			Construction.—Six Strands of 37 Wires each.		
Circumference, in inches.	Diameter, in inches (approx.).	Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 1/4 1/2 3/4	5/16	3-0	T. cwt. qr. lb. 0 8 2 8	960	2-7	T. cwt. qr. lb. 0 7 2 24	864	2-9	T. cwt. qr. lb. 0 8 1 4	928
	13/32	4-7	0 13 1 20	1,504	4-5	0 12 3 12	1,440	4-3	0 12 1 4	1,376
	15/32	6-7	0 19 0 16	2,144	6-3	0 18 0 0	2,016	6-4	0 18 1 4	2,048
	9/16	9-1	1 6 0 0	2,912	8-4	1 4 0 0	2,688	9-0	1 5 2 24	2,880
2 1/4 1/2 3/4	5/8	12-4	1 15 1 20	3,968	11-5	1 12 3 12	3,680	11-9	1 14 0 0	3,808
	23/32	15-6	2 4 2 8	4,992	14-3	2 0 3 12	4,576	15-3	2 3 2 24	4,896
	13/16	19-1	2 14 2 8	6,112	17-4	2 9 2 24	5,568	18-1	2 11 2 24	5,792
	7/8	22-9	3 5 1 20	7,328	21-6	3 1 2 24	6,912	22-3	3 3 2 24	7,136
3 1/4 1/2 3/4	15/16	28-9	4 2 2 8	9,248	25-4	3 12 2 8	8,128	26-9	3 16 3 12	8,608
	13/32	33-6	4 16 0 0	10,752	30-5	4 7 0 16	9,760	30-6	4 7 1 20	9,792
	11/8	39-6	5 13 0 16	12,672	35-0	5 0 0 0	11,200	36-0	5 2 3 12	11,520
	13/16	45-1	6 8 3 12	14,432	39-7	5 13 1 0	12,704	41-7	5 19 0 16	13,344
4 1/4 1/2 3/4	19/32	50-9	7 5 1 20	16,288	46-0	6 11 1 20	14,720	47-8	6 16 2 8	15,296
	111/32	57-1	8 3 0 16	18,272	51-4	7 6 3 12	16,448	54-4	7 15 1 20	17,408
	17/16	65-0	9 5 2 24	20,800	57-2	8 3 1 20	18,304	59-6	8 10 1 4	19,072
	11/2	71-9	10 5 1 20	23,008	64-7	9 4 3 12	20,704	67-0	9 11 1 20	21,440
5 1/4 1/2 3/4	119/32	79-2	11 6 1 4	25,344	71-1	10 3 0 16	22,752	74-7	10 13 1 20	23,904
	111/16	88-5	12 12 3 12	28,320	77-9	11 2 2 8	24,928	83-0	11 17 0 16	26,560
	13/4	96-5	13 15 2 24	30,880	84-9	12 2 2 8	27,168	89-3	12 15 0 16	28,576
	127/32	104-9	14 19 2 24	33,568	94-0	13 8 2 8	30,080	98-3	14 0 3 12	31,456
6	129/32	115-5	16 10 0 0	36,960	101-7	14 10 2 8	32,544	107-6	15 7 1 20	34,432



Table No. 20.—Galvanized-steel-wire Ropes.

TABLE OF BREAKING-LOADS AND CORRESPONDING SAFE-WORKING LOADS FOR GALVANIZED-STEEL-WIRE ROPES OF HAWSER BASIC QUALITY, USED FOR SINGLE WHIPS, SINGLE STROPS, OR LONG-EYED SNOTTERS, AND FOR OTHER SIMILAR CASES WHERE THE LOAD IS CARRIED ON A SINGLE PART.

(Tensile strength of wires, 85-95 tons per square inch.)

Size of Rope.		Flexible.			Special Flexible.			Special Flexible.		
Circumference, in Inches.	Diameter, in Inches (approx.).	Construction.—Six Strands of 12 Wires each.			Construction.—Six Strands of 24 Wires each.			Construction.—Six Strands of 30 Wires each.		
		Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Actual Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	2.0	T. cwt. qr. lb. 0 5 2 24	640	2.6	T. cwt. qr. lb. 0 7 1 20	832	2.6	T. cwt. qr. lb. 0 7 1 20	832
	13/32	3.1	0 8 3 12	992	4.4	0 12 2 8	1,408	3.6	0 10 1 4	1,152
	15/32	4.8	0 13 2 24	1,536	6.1	0 17 1 20	1,952	5.4	0 15 1 18	1,728
	9/16	6.4	0 18 1 4	2,048	8.7	1 4 3 11	2,783	7.5	1 1 1 20	2,400
2	5/8	8.3	1 3 2 24	2,656	11.2	1 12 0 0	3,584	10.0	1 8 2 8	3,200
	23/32	10.8	1 10 3 12	3,456	14.7	2 2 0 0	4,704	12.8	1 16 2 8	4,096
	13/16	13.2	1 17 2 24	4,224	17.7	2 10 2 8	5,664	15.2	2 3 1 20	4,864
	7/8	15.2	2 3 1 20	4,864	21.1	3 0 1 4	6,752	19.6	2 16 0 0	6,272
3	15/16	18.6	2 13 0 16	5,952	25.7	3 13 1 20	8,224	23.5	3 7 0 16	7,520
	1 1/32	21.7	3 2 0 0	6,944	29.7	4 4 3 12	9,504	25.6	3 13 0 16	8,192
	1 1/8	25.7	3 13 1 20	8,224	35.2	5 0 2 8	11,264	30.1	4 6 0 0	9,632
	1 3/16	29.3	4 3 2 24	9,376	39.9	5 14 0 0	12,768	34.9	4 19 2 24	11,168
4	1 9/32	33.2	4 14 3 12	10,624	44.9	6 8 1 4	14,368	40.1	5 14 2 8	12,832
	1 11/32	36.4	5 4 0 0	11,648	51.5	7 7 0 16	16,480	45.6	6 10 1 4	14,592
	1 7/16	43.3	6 3 2 24	13,856	58.6	8 7 1 19	18,751	51.4	7 6 3 12	16,448
	1 1/2	47.0	6 14 1 4	15,040	64.6	9 4 2 8	20,672	57.6	8 4 2 8	18,432
5	1 19/32	52.8	7 10 3 12	16,896	70.9	10 2 2 7	22,687	64.2	9 3 1 20	20,544
	1 11/16	..	..	..	77.5	11 1 1 19	24,799	71.2	10 3 1 20	22,784
	1 3/4	..	..	..	84.4	12 1 0 16	27,008	76.6	10 18 3 12	24,512
	1 27/32	..	..	..	91.5	13 1 1 20	29,280	82.3	11 15 0 16	26,336
6	1 29/32	..	..	..	99.1	14 3 0 16	31,712	92.1	13 3 0 16	29,472
	2	..	..	..	104.5	14 18 2 8	33,440	98.3	14 0 3 12	31,456
	2 3/32	..	..	..	112.3	16 0 3 12	35,936	104.7	14 19 0 16	33,504
	2 5/32	..	..	..	120.3	17 3 2 24	38,496	111.2	15 17 2 24	35,584
7	2 7/32	..	..	..	130.7	18 13 1 20	41,824	120.0	17 2 3 12	38,400
	2 3/8	..	..	..	..	..	..	131.8	18 16 2 8	42,176
8	2 17/32	..	..	..	..	..	..	148.8	21 5 0 16	47,616

Table No. 21.—Black-wire-rope Slings.

TABLE OF SAFE-WORKING LOADS FOR BLACK-WIRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING, AND MADE OF ROPE HAVING THE BREAKING-LOAD SPECIFIED IN APPENDIX II.


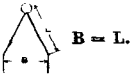
Size of Rope.		Safe-working Loads for various Distances between Legs.											
		 Legs Parallel.						 B = L.					
Circumference, in Inches.	Diameter, in Inches (approximate).	Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
		Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.	
	0 17 0 16	1,920	0 15 1 20	1,728	0 16 2 8	1,856	0 14 3 10	1,662	0 13 1 12	1,496	0 14 1 11	1,607	
	1 6 3 12	3,008	1 5 2 24	2,880	1 4 2 8	2,752	1 3 1 1	2,605	1 2 1 2	2,494	1 1 1 3	2,383	
	1 18 1 4	4,288	1 16 0 0	4,032	1 16 2 8	4,096	1 13 0 17	3,713	1 11 0 19	3,491	1 11 2 19	3,547	
9/16	2 12 0 0	5,824	2 8 0 0	5,376	2 11 1 20	5,760	2 5 0 3	5,043	2 1 2 7	4,655	2 4 2 4	4,988	
2	5/8	3 10 3 12	7,936	3 5 2 24	7,360	3 8 0 0	7,616	3 1 1 12	6,872	2 16 3 17	6,373	2 18 3 15	6,595
	23/32	4 9 0 16	9,984	4 1 2 24	9,152	4 7 1 20	9,792	3 17 0 22	8,646	3 10 3 1	7,925	3 15 2 24	8,480
	13/16	5 9 0 16	12,224	4 19 1 20	11,136	5 3 1 20	11,584	4 14 2 2	10,586	4 6 0 12	9,644	4 9 2 8	10,032
	7/8	6 10 3 12	14,656	6 3 1 20	13,824	6 7 1 20	14,272	5 13 1 8	12,692	5 6 3 15	11,971	5 10 1 11	12,359
3	15/16	8 5 0 16	18,496	7 5 0 16	16,256	7 13 2 24	17,216	7 3 0 2	16,018	6 5 2 22	14,078	6 13 0 13	14,909
	1 1/32	9 12 0 0	21,504	8 14 1 4	19,520	8 14 3 12	19,584	8 6 1 3	18,623	7 10 3 20	16,904	7 11 1 20	16,960
	1 1/8	11 6 1 4	25,344	10 0 0 0	22,400	10 5 2 24	23,040	9 15 3 24	21,948	8 13 0 22	19,398	8 18 0 17	19,953
	1 3/16	12 17 2 24	28,864	11 6 3 12	25,408	11 18 1 4	26,688	11 3 0 20	24,996	9 16 1 23	22,003	10 6 1 12	23,112
4	1 9/32	14 10 3 12	32,576	13 2 3 12	29,440	13 13 0 16	30,592	12 11 3 15	28,211	11 7 2 15	25,495	11 16 2 5	26,493
	1 11/32	16 6 1 4	36,544	14 13 2 24	32,896	15 10 3 12	34,816	14 2 2 8	31,648	12 14 1 12	28,488	13 9 0 23	30,151
	1 7/16	18 11 1 20	41,600	16 6 3 12	36,608	17 0 2 8	38,144	16 1 2 18	36,026	14 3 0 7	31,703	14 14 3 21	33,033
	1 1/2	20 10 3 12	46,016	18 9 2 24	41,408	19 2 3 12	42,880	17 15 3 7	39,851	16 0 0 20	35,860	16 11 2 7	37,135
5	1 19/32	22 12 2 8	50,688	20 6 1 4	45,504	21 6 3 12	47,808	19 11 3 21	43,897	17 11 3 11	39,407	18 9 2 18	41,402
	1 11/16	25 5 2 24	56,640	22 5 0 16	49,856	23 14 1 4	53,120	21 17 3 23	49,051	19 5 2 0	43,176	20 10 2 27	46,003
	1 3/4	27 11 1 20	61,760	24 5 0 16	54,336	25 10 1 4	57,152	23 17 2 5	53,485	21 0 0 16	47,056	22 1 3 19	49,495
	1 27/32	29 19 1 20	67,136	26 17 0 16	60,160	28 1 2 24	62,912	25 19 0 13	58,141	23 5 0 20	52,100	24 6 1 23	54,483
6	1 29/32	33 0 0 0	73,920	29 1 0 16	65,088	30 14 3 12	68,864	28 11 2 8	64,016	25 3 1 3	56,367	26 12 1 26	59,638

Table No. 21.—Black-wire-rope Slings—continued.

TABLE OF SAFE-WORKING LOADS FOR BLACK-WIRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING, AND MADE OF ROPE HAVING THE BREAKING-LOAD SPECIFIED IN APPENDIX II—continued

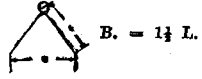
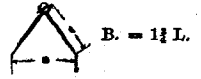
Size of Rope.		Safe Working-loads for various Distances between Legs.											
													
Circumference, in Inches.	Diameter, in Inches (approximate).	Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
		Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.	
	0 11 1 9	1,269	0 10 0 22	1,142	0 10 3 23	1,227	0 8 1 5	929	0 7 1 24	836	0 8 0 2	898	
	13/32	0 17 3 1	1,989	0 17 0 0	1,904	0 16 1 0	1,820	0 13 0 0	1,456	0 12 1 22	1,394	0 11 3 16	1,332
	15/32	1 5 1 8	2,836	1 3 3 6	2,666	1 4 0 21	2,709	0 18 2 3	2,075	0 17 1 19	1,951	0 17 2 22	1,982
2	9/16	1 14 1 16	3,852	1 11 2 27	3,555	1 14 0 1	3,809	1 5 0 19	2,819	1 3 0 26	2,602	1 4 3 16	2,788
	5/8	2 6 3 13	5,249	2 3 1 24	4,868	2 4 3 25	5,037	1 14 1 6	3,842	1 11 3 7	3,563	1 12 3 19	3,687
	23/32	2 18 3 23	6,603	2 14 0 5	6,053	2 17 3 8	6,476	2 3 0 17	4,833	1 19 2 6	4,430	2 2 1 8	4,740
	13/16	3 12 0 21	8,085	3 5 3 1	7,365	3 8 1 18	7,662	2 12 3 9	5,917	2 8 0 15	5,391	2 10 0 8	5,608
3	7/8	4 6 2 6	9,694	4 1 2 15	9,143	4 4 1 4	9,440	3 3 1 11	7,095	2 19 3 0	6,692	3 1 2 21	6,909
	15/16	5 9 0 25	12,233	4 16 0 0	10,752	5 1 2 19	11,387	3 19 3 22	8,954	3 10 1 1	7,869	3 14 1 18	8,334
	11/32	6 6 3 27	14,223	5 15 1 3	12,911	5 15 2 17	12,953	4 12 3 22	10,410	4 4 1 14	9,450	4 4 2 17	9,481
	11/8	7 9 2 19	16,763	6 12 1 4	14,816	6 16 0 7	15,239	5 9 2 6	12,270	4 16 3 8	10,844	4 19 2 10	11,154
4	13/16	8 10 1 23	19,091	7 10 0 5	16,805	7 17 2 12	17,652	6 4 3 1	13,973	5 9 3 8	12,300	5 15 1 12	12,920
	19/32	9 12 1 15	21,547	8 13 3 12	19,472	9 0 2 18	20,234	7 0 3 6	15,770	6 7 1 0	14,252	6 12 0 26	14,810
	111/32	10 15 3 7	24,171	9 14 1 2	21,758	10 5 2 12	23,028	7 17 3 24	17,692	7 2 0 21	15,925	7 10 1 27	16,855
	17/16	12 5 2 19	27,515	10 16 0 21	24,213	11 5 1 1	25,229	8 19 3 7	20,139	7 18 0 26	17,722	8 4 3 14	18,466
5	11/2	13 11 3 0	30,436	12 4 2 4	27,388	12 13 0 26	28,362	9 18 3 17	22,277	8 18 3 26	20,046	9 5 1 11	20,759
	119/32	14 19 1 10	33,526	13 8 2 26	30,098	14 2 1 10	31,622	10 19 0 11	24,539	9 16 2 21	22,029	10 6 2 16	23,144
	111/16	16 14 1 27	37,463	14 14 1 20	32,976	15 13 2 23	35,135	12 4 3 8	27,420	10 15 2 0	24,136	11 9 2 12	25,716
	13/4	18 4 2 26	40,850	16 0 3 15	35,939	16 17 2 2	37,802	13 6 3 23	29,899	11 14 3 13	26,305	12 7 0 4	27,668
6	127/32	19 16 1 26	44,406	17 15 1 4	39,792	18 11 2 4	41,612	14 10 0 22	32,502	13 0 0 4	29,124	13 11 3 21	30,457
	129/32	21 16 2 5	48,893	19 4 1 15	43,051	20 6 2 21	45,549	15 19 2 2	35,786	14 1 1 10	31,510	14 17 2 18	33,338

Table No. 22.—Galvanized-wire-rope Slings.

TABLE OF SAFE-WORKING LOADS FOR GALVANIZED-WIRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING, MADE OF ROPE HAVING THE BREAKING-LOAD SPECIFIED IN APPENDIX III.


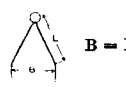
Size of Rope.		Safe-working Loads for various Distances between Legs.											
		 Legs Parallel.						 B = L.					
Circumference, in Inches.	Diameter, in Inches (approximate).	Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
		Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.	
	13/32	0 11 1 20	1,280	0 14 3 12	1,664	0 14 3 12	1,664	0 9 3 17	1,109	0 12 3 13	1,441	0 12 3 13	1,441
	15/32	0 17 2 24	1,984	1 5 0 16	2,816	1 0 2 8	2,304	0 15 1 10	1,718	1 1 3 2	2,438	0 17 3 7	1,995
	9/16	1 7 1 20	3,072	1 14 3 12	3,904	1 10 3 8	3,452	1 3 3 0	2,660	1 10 0 21	3,381	1 6 2 22	2,990
2	5/8	1 16 2 8	4,096	2 9 2 22	5,566	2 2 3 12	4,800	1 11 2 19	3,547	2 3 0 4	4,820	1 17 0 13	4,157
	23/32	2 7 1 20	5,312	3 4 0 0	7,168	2 17 0 16	6,400	2 1 0 8	4,600	2 15 1 20	6,208	2 9 1 27	5,543
	13/16	3 1 2 24	6,912	4 4 0 0	9,408	3 13 0 16	8,192	2 13 1 22	5,986	3 12 3 0	8,148	3 3 1 11	7,095
	7/8	3 15 1 20	8,448	5 1 0 16	11,328	4 6 3 12	9,728	3 5 1 8	7,316	4 7 2 10	9,810	3 15 0 25	8,425
3	15/16	4 6 3 12	9,728	6 0 2 8	13,504	5 12 0 0	12,544	3 15 0 23	8,423	5 4 1 19	11,695	4 16 3 27	10,863
	11/32	5 6 1 4	11,904	7 6 3 12	16,448	6 14 1 4	15,040	4 12 0 5	10,309	6 7 0 20	14,244	5 16 1 5	13,025
	11/8	6 4 0 0	13,888	8 9 2 24	19,008	7 6 1 4	16,384	5 7 1 15	12,027	7 6 3 25	16,461	6 6 2 21	14,189
	13/16	7 6 3 12	16,448	10 1 0 16	22,528	8 12 0 0	19,264	6 7 0 20	14,244	8 14 0 22	19,510	7 8 3 23	16,683
4	19/32	8 7 1 20	18,752	11 8 0 0	25,536	9 19 1 20	22,336	7 5 0 0	16,240	9 17 1 26	22,115	8 12 2 23	19,343
	111/32	9 9 2 24	21,248	12 16 2 8	28,736	11 9 0 16	25,664	8 4 1 05	18,401	11 2 0 22	24,886	9 18 1 22	22,226
	17/16	10 8 0 0	23,296	14 14 1 4	32,960	13 0 2 8	29,184	9 0 0 15	20,175	12 14 3 12	28,544	11 5 2 18	25,274
	11/2	12 7 1 20	27,712	16 14 3 10	37,502	14 13 2 24	32,896	10 14 1 3	23,999	14 9 3 25	32,477	12 14 1 14	28,490
5	119/32	13 8 2 8	30,080	18 9 0 16	41,344	16 9 0 16	36,864	11 12 2 10	26,050	15 19 2 21	35,805	14 5 0 5	31,925
	127/32	15 1 2 24	33,792	20 5 0 14	45,374	18 6 3 12	41,088	13 1 1 5	29,265	17 10 3 13	39,295	15 17 2 23	35,583
	13/4	..	..	22 2 3 10	49,598	20 6 3 12	45,568	..	..	19 3 2 1	42,953	17 12 1 11	39,463
	127/32	..	..	24 2 1 4	54,016	21 17 2 24	49,024	..	..	20 17 2 19	46,779	18 19 0 8	42,456
6	127/32	..	..	26 2 3 12	58,560	23 10 1 4	52,672	..	..	22 12 3 6	50,714	20 7 1 3	45,615
	120/32	..	..	28 6 1 4	63,424	26 6 1 4	58,944	..	..	24 10 1 19	54,927	22 15 3 3	51,047
	2	..	..	29 17 0 16	66,880	28 1 2 24	62,912	..	..	25 17 0 16	57,920	24 6 1 23	54,483
	23/32	..	..	32 1 2 24	71,872	29 18 1 4	67,008	..	..	27 15 2 27	62,243	25 18 0 14	58,030
7	25/32	..	..	34 7 1 20	76,992	31 15 1 20	71,168	..	..	29 15 1 9	66,677	27 10 1 5	61,633
	27/32	..	..	37 6 3 12	83,648	34 5 2 24	76,800	..	..	32 6 3 5	72,441	29 13 3 11	66,511
	23/8	..	..	..	..	37 13 0 16	84,352	..	..	..	..	32 12 0 27	73,051
8	217/32	..	..	..	..	42 10 1 4	95,232	..	..	..	..	36 16 1 13	82,473

Table No. 22.—Galvanized-wire-rope Slings—continued.

TABLE OF SAFE-WORKING LOADS FOR GALVANIZED-WIRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING, MADE OF ROPE HAVING THE BREAKING-LOAD SPECIFIED IN APPENDIX III—continued.

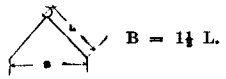
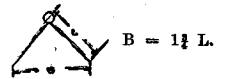
Size of Rope.		Safe-working Loads for various Distances between Legs.											
		 B = 1 1/4 L.						 B = 1 1/4 L.					
		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approximate).	Working-load, in Tons, &c.		Working-load, in Pounds.		Working-load, in Tons, &c.		Working-load, in Pounds.		Working-load, in Tons, &c.		Working-load, in Pounds.	
		1	5/16	T. cwt. qr. lb.	847	T. cwt. qr. lb.	1,101	T. cwt. qr. lb.	1,101	T. cwt. qr. lb.	620	T. cwt. qr. lb.	806
13/32	0 7 2 7		1,312	0 16 2 15	1,863	0 13 2 12	1,524	0 8 2 9	961	0 12 0 19	1,363	0 9 3 23	1,115
15/32	0 11 2 24		2,032	1 3 0 7	2,583	1 0 1 16	2,284	0 13 1 3	1,487	0 16 3 14	1,890	0 14 3 19	1,671
9/16	0 18 0 16		2,710	1 12 3 14	3,682	1 8 1 11	3,175	0 17 2 23	1,983	1 4 0 7	2,695	1 0 3 0	2,324
2	5/8	1 11 1 14	3,514	2 2 1 0	4,742	1 17 3 16	4,234	1 2 3 24	2,572	1 10 3 26	3,470	1 7 2 18	3,098
	23/32	2 0 3 8	4,572	2 15 2 7	6,223	2 8 1 15	5,419	1 9 3 14	3,346	2 0 2 19	4,555	1 15 1 18	3,966
	13/16	2 9 3 16	5,588	3 6 3 17	7,493	2 17 1 23	6,435	1 16 2 2	4,090	2 8 3 24	5,484	2 2 0 6	4,710
	7/8	2 17 1 22	6,434	3 19 3 1	8,933	3 14 0 10	8,298	2 2 0 5	4,709	2 18 1 14	6,538	2 14 0 25	6,073
3	15/16	3 10 1 7	7,875	4 17 0 16	10,880	4 8 3 9	9,949	2 11 1 23	5,763	3 11 0 9	7,963	3 5 0 1	7,281
	1 1/32	4 2 0 3	9,187	5 12 0 22	12,566	4 16 3 2	10,838	3 0 0 4	6,724	4 2 0 13	9,202	3 10 3 8	7,932
	1 1/8	4 17 0 16	10,880	6 13 0 6	14,902	5 13 3 3	12,743	3 11 0 12	7,963	4 17 1 15	10,907	4 3 1 2	9,326
	1 3/16	5 10 3 1	12,405	7 10 3 8	16,892	6 11 3 19	14,775	4 1 0 6	9,078	5 10 1 15	12,363	4 16 2 5	10,813
4	1 9/32	6 5 1 23	14,051	8 9 2 27	19,011	7 11 2 9	16,977	4 11 3 6	10,282	6 4 0 24	13,912	5 10 3 21	12,425
	1 11/32	6 17 2 9	15,409	9 14 2 19	21,803	8 12 1 13	19,305	5 0 2 15	11,271	7 2 1 25	15,957	6 6 0 16	14,128
	1 7/16	8 3 2 18	18,330	11 1 2 0	24,808	9 14 1 6	21,762	5 19 2 27	13,411	8 2 0 16	18,160	7 2 0 23	15,927
	1 1/2	8 17 2 16	19,896	12 4 0 19	27,347	10 17 2 26	24,386	6 10 0 3	14,563	8 18 2 24	20,016	7 19 1 11	17,847
5	1 19/32	9 19 2 7	22,351	13 7 3 27	30,015	12 2 2 17	27,177	7 6 0 3	16,355	9 16 0 15	21,967	8 17 2 12	19,892
	1 13/16	..	..	14 12 3 21	32,809	13 9 0 15	30,143	..	..	10 14 1 16	24,012	9 16 3 25	22,061
	1 3/4	..	..	15 19 0 3	35,731	14 9 2 2	32,426	..	..	11 13 1 27	26,151	10 11 3 18	23,734
	1 27/32	..	..	17 5 3 10	38,734	15 11 0 11	34,843	..	..	12 13 0 15	28,351	11 7 2 20	25,500
6	1 29/32	..	..	18 14 2 7	41,951	17 8 0 16	38,992	..	..	13 14 0 17	30,705	12 14 3 5	28,537
	2	..	..	19 5 1 25	44,237	18 11 2 8	41,616	..	..	14 9 0 11	32,379	13 11 3 22	30,458
	2 3/32	..	..	21 4 1 23	47,539	19 15 3 2	44,326	..	..	15 10 2 20	34,796	14 9 2 17	32,441
	2 5/32	..	..	22 14 2 22	50,926	21 0 1 5	47,073	..	..	16 12 3 6	37,274	15 7 2 15	34,455
7	2 7/32	..	..	24 14 0 0	55,328	22 13 2 7	50,799	..	..	18 1 2 9	40,497	16 11 3 25	37,181
	2 3/8	..	..	..	..	24 18 0 18	55,794	..	..	..	..	18 4 2 13	40,837
8	2 17/32	..	..	..	..	28 2 1 18	62,990	..	..	..	..	20 11 2 17	46,105

Table No. 23.—Black-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON TWO PARTS (DIAGRAM NO. 10).

(Ropes are to be equal to the breaking-loads specified in Table 2.)

Size of Rope.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 1 1 1	5/16	T. cwt. qr. lb. 1 0 0 0	2,240	T. cwt. qr. lb. 0 18 0 0	2,016	T. cwt. qr. lb. 0 19 1 9	2,165
	13/32	1 11 1 9	3,509	1 10 0 0	3,360	1 8 2 18	3,210
	15/32	2 4 2 18	5,002	2 2 0 0	4,704	2 2 2 18	4,778
	9/16	3 0 2 18	6,794	2 16 0 0	6,272	3 0 0 0	6,720
2 1 1 1	5/8	4 2 2 18	9,258	3 16 2 18	8,586	3 19 1 9	8,885
	23/32	5 4 0 0	11,648	4 15 1 9	10,677	5 2 0 0	11,424
	13/16	6 7 1 9	14,261	5 16 0 0	12,992	6 0 2 18	13,514
	7/8	7 12 2 18	17,098	7 4 0 0	16,128	7 8 2 18	16,650
3	15/16	9 12 2 18	21,578	8 9 1 9	18,965	8 19 1 9	20,085

Table No. 24.—Black-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON THREE PARTS (DIAGRAM NO. 11).

(Ropes are to be equal to the breaking-loads specified in Table 2.)

Size of Rope.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 1 1 1	5/16	T. cwt. qr. lb. 1 10 0 0	3,360	T. cwt. qr. lb. 1 7 0 0	3,024	T. cwt. qr. lb. 1 9 0 0	3,248
	13/32	2 7 0 0	5,264	2 5 0 0	5,040	2 3 0 0	4,816
	16/32	3 7 0 0	7,504	3 3 0 0	7,056	3 4 0 0	7,168
	9/16	4 11 0 0	10,192	4 4 0 0	9,408	4 10 0 0	10,080
2 1 1 1	5/8	6 4 0 0	13,888	5 15 0 0	12,880	5 19 0 0	13,328
	23/32	7 16 0 0	17,472	7 3 0 0	16,016	7 13 0 0	17,136
	13/16	9 11 0 0	21,392	8 14 0 0	19,488	9 1 0 0	20,272
	7/8	11 9 0 0	25,648	10 16 0 0	24,192	11 3 0 0	24,976
3	15/16	14 9 0 0	32,368	12 14 0 0	28,448	13 9 0 0	30,128

**Table No. 25.—Black-wire-rope Purchases.**

**TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON FOUR PARTS (DIAGRAM NO. 12).**

(Ropes are to be equal to the breaking-loads specified in Table 2.)

Size of Rope.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 2 0 0 0	4,480	T. cwt. qr. lb. 1 16 0 0	4,032	T. cwt. qr. lb. 1 18 2 18	4,330
	$\frac{13}{32}$	3 2 2 18	7,018	3 0 0 0	6,720	2 17 1 8	6,420
	$\frac{15}{32}$	4 9 1 8	10,004	4 4 0 0	9,408	4 5 1 8	9,556
	$\frac{9}{16}$	6 1 1 8	13,588	5 12 0 0	12,544	6 0 0 0	13,440
2 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	8 5 1 8	18,516	7 13 1 8	17,172	7 18 2 18	17,770
	$\frac{23}{32}$	10 8 0 0	23,296	9 10 2 18	21,354	10 4 0 0	22,848
	$\frac{13}{16}$	12 14 2 18	28,522	11 12 0 0	25,984	12 1 1 8	27,028
	$\frac{7}{8}$	15 5 1 8	34,196	14 8 0 0	32,256	14 17 1 8	33,300
3	$\frac{15}{16}$	19 5 1 8	43,156	16 18 2 18	37,930	17 18 2 18	40,170

**Table No. 26.—Black-wire-rope Purchases.**

**TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON FIVE PARTS (DIAGRAM NO. 13).**

(Ropes are to be equal to the breaking-loads specified in Table 2.)

Size of Rope.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 2 10 0 0	5,600	T. cwt. qr. lb. 2 5 0 0	5,040	T. cwt. qr. lb. 2 8 1 9	5,413
	$\frac{13}{32}$	3 18 1 9	8,773	3 15 0 0	8,400	3 11 2 18	8,026
	$\frac{15}{32}$	5 11 2 18	12,506	5 5 0 0	11,760	5 6 2 18	11,946
	$\frac{9}{16}$	7 11 2 18	16,986	7 0 0 0	15,680	7 10 0 0	16,800
2 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	10 6 2 18	23,146	9 11 2 18	21,466	9 18 1 9	22,213
	$\frac{23}{32}$	13 0 0 0	29,120	11 18 1 9	26,693	12 15 0 0	28,560
	$\frac{13}{16}$	15 18 1 9	35,653	14 10 0 0	32,480	15 1 2 18	33,786
	$\frac{7}{8}$	19 1 2 18	42,746	18 0 0 0	40,320	18 11 2 18	41,626
3	$\frac{15}{16}$	24 1 2 18	53,946	21 3 1 9	47,413	22 8 1 9	50,213

Table No. 27.—Black-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON SIX PARTS (DIAGRAM NO. 14).

(Ropes are to be equal to the breaking-loads specified in Table 2.)

Size of Rope.		Strands and Wires 6/19.		Strands and Wires 6/24.		Strands and Wires 6/37.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 3 0 0 0	6,720	T. cwt. qr. lb. 2 14 0 0	6,048	T. cwt. qr. lb. 2 18 0 0	6,496
	$\frac{13}{32}$	4 14 0 0	10,528	4 10 0 0	10,080	4 6 0 0	9,632
	$\frac{15}{32}$	6 14 0 0	15,008	6 6 0 0	14,112	6 8 0 0	14,336
	$\frac{9}{16}$	9 2 0 0	20,384	8 8 0 0	18,816	9 0 0 0	20,160
2 $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	12 8 0 0	27,776	11 10 0 0	25,760	11 18 0 0	26,656
	$\frac{23}{32}$	15 12 0 0	34,944	14 6 0 0	32,032	15 6 0 0	34,272
	$\frac{13}{16}$	19 2 0 0	42,784	17 8 0 0	38,976	18 2 0 0	40,544
	$\frac{7}{8}$	22 18 0 0	51,296	21 12 0 0	48,384	22 6 0 0	49,952
3	$\frac{15}{16}$	28 18 0 0	64,736	25 8 0 0	56,896	26 18 0 0	60,256

Table No. 28.—Galvanized-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON TWO PARTS (DIAGRAM NO. 10).

(Ropes are to be equal to the breaking-loads specified in Table 3.)

Size of Rope.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 0 13 1 9	1,493	T. cwt. qr. lb. 0 17 1 9	1,941	T. cwt. qr. lb. 0 17 1 9	1,941
	$\frac{13}{32}$	1 0 2 19	2,315	1 9 1 9	3,285	1 4 0 0	2,688
	$\frac{15}{32}$	1 12 0 0	3,584	2 0 2 19	4,555	1 16 0 0	4,032
	$\frac{9}{16}$	2 2 2 19	4,779	2 18 0 0	6,496	2 10 0 0	5,600
2 $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	2 15 1 9	6,197	3 14 2 19	8,363	3 6 2 19	7,467
	$\frac{23}{32}$	3 12 0 0	8,064	4 18 0 0	10,976	4 5 1 9	9,557
	$\frac{13}{16}$	4 8 0 0	9,856	5 18 0 0	13,216	5 1 1 9	11,349
	$\frac{7}{8}$	5 1 1 9	11,349	7 0 2 19	15,755	6 10 2 19	14,635
3	$\frac{15}{16}$	6 4 0 0	13,888	8 11 1 9	19,189	7 16 2 19	17,547



**Table No. 29.—Galvanized-wire-rope Purchases.**

**TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON THREE PARTS (DIAGRAM NO. 11).**

(Ropes are to be equal to the breaking-loads specified in Table 3.)

Size of Rope.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.	
		1 0 0 0	2,240	1 6 0 0	2,912	1 6 0 0	2,912
	13/32	1 11 0 0	3,472	2 4 0 0	4,928	1 16 0 0	4,032
	15/32	2 8 0 0	5,376	3 1 0 0	6,832	2 14 0 0	6,048
2	9/16	3 4 0 0	7,168	4 7 0 0	9,744	3 15 0 0	8,400
	5/8	4 3 0 0	9,296	5 12 0 0	12,544	5 0 0 0	11,200
	23/32	5 8 0 0	12,096	7 7 0 0	16,464	6 8 0 0	14,336
	13/16	6 12 0 0	14,784	8 17 0 0	19,824	7 12 0 0	17,024
3	7/8	7 12 0 0	17,024	10 11 0 0	23,632	9 16 0 0	21,952
	15/16	9 6 0 0	20,832	12 17 0 0	28,784	11 15 0 0	26,320

**Table No. 30.—Galvanized-wire-rope Purchases.**

**TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON FOUR PARTS (DIAGRAM NO. 12).**

(Ropes are to be equal to the breaking-loads specified in Table 3.)

Size of Rope.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1	5/16	T. cwt. qr. lb.		T. cwt. qr. lb.		T. cwt. qr. lb.	
		1 6 2 18	2,986	1 14 2 18	3,882	1 14 2 18	3,882
	13/32	2 1 1 10	4,630	2 18 2 18	6,570	2 8 0 0	5,376
	15/32	3 4 0 0	7,168	4 1 1 10	9,110	3 12 0 0	8,064
2	9/16	4 5 1 10	9,558	5 16 0 0	12,992	5 0 0 0	11,200
	5/8	5 10 2 19	12,395	7 9 1 10	16,726	6 13 1 10	14,934
	23/32	7 4 0 0	16,128	9 16 0 0	21,952	8 10 2 18	19,114
	13/16	8 16 0 0	19,712	11 16 0 0	26,432	10 2 2 18	22,698
3	7/8	10 2 2 18	22,698	14 1 1 10	31,510	13 1 1 10	29,270
	15/16	12 8 0 0	27,776	17 2 2 18	38,378	15 13 1 10	35,094

Table No. 31.—Galvanized-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON FIVE PARTS (DIAGRAM No. 13).

(Ropes are to be equal to the breaking-loads specified in Table 3.)

Size of Rope.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 1 13 1 9	3,733	T. cwt. qr. lb. 2 3 1 9	4,853	T. cwt. qr. lb. 2 3 1 9	4,853
	$\frac{13}{32}$	2 11 2 19	5,787	3 13 1 9	8,213	3 0 0 0	6,720
	$\frac{15}{32}$	4 0 0 0	8,960	5 1 2 19	11,387	4 10 0 0	10,080
	$\frac{9}{16}$	5 6 2 19	11,947	7 5 0 0	16,240	6 5 0 0	14,000
2 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	6 18 1 9	15,493	9 6 2 19	20,907	8 6 2 19	18,667
	$\frac{23}{32}$	9 0 0 0	20,160	12 5 0 0	27,440	10 13 1 9	23,893
	$\frac{13}{16}$	11 0 0 0	24,640	14 15 0 0	33,040	12 13 1 9	28,373
	$\frac{7}{8}$	12 13 1 9	28,373	17 11 2 19	39,387	16 6 2 19	36,587
3	$\frac{15}{16}$	15 10 0 0	34,720	21 8 1 9	47,973	19 11 2 19	43,867

Table No. 32.—Galvanized-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON SIX PARTS (DIAGRAM No. 14).

(Ropes are to be equal to the breaking-loads specified in Table 3.)

Size of Rope.		Strands and Wires 6/12.		Strands and Wires 6/24.		Strands and Wires 6/30.	
Circumference, in Inches.	Diameter, in Inches (approx.).	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.
1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{16}$	T. cwt. qr. lb. 2 0 0 0	4,480	T. cwt. qr. lb. 2 12 0 0	5,824	T. cwt. qr. lb. 2 12 0 0	5,824
	$\frac{13}{32}$	3 2 0 0	6,944	4 8 0 0	9,856	3 12 0 0	8,064
	$\frac{15}{32}$	4 16 0 0	10,752	6 2 0 0	13,664	5 8 0 0	12,096
	$\frac{9}{16}$	6 8 0 0	14,336	8 14 0 0	19,488	7 10 0 0	16,800
2 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	$\frac{5}{8}$	8 6 0 0	18,592	11 4 0 0	25,088	10 0 0 0	22,400
	$\frac{23}{32}$	10 16 0 0	24,192	14 14 0 0	32,928	12 16 0 0	28,672
	$\frac{13}{16}$	13 4 0 0	29,568	17 14 0 0	39,648	15 4 0 0	34,048
	$\frac{7}{8}$	15 4 0 0	34,048	21 2 0 0	47,264	19 12 0 0	43,904
3	$\frac{15}{16}$	18 12 0 0	41,664	25 14 0 0	57,568	23 10 0 0	52,640

Table No. 33.—Double-wire-rope Strops.

TABLE OF BREAKING-LOADS AND CORRESPONDING SAFE-WORKING LOADS FOR DOUBLE STROPS WITH A THIMBLE IN EACH END AND MADE OF BLACK-STEEL-WIRE ROPE OF PATENT IMPROVED PATENT STEEL QUALITY OF THE BREAKING-LOAD SPECIFIED IN TABLE 2.

(Strop loaded as shown in Diagram No. 7.)

Two Ropes each of Size		Strands and Wires 6/19.			Strands and Wires 6/24.			Strands and Wires 6/37.		
Circumference, in Inches.	Diameter, in Inches.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.
2	$\frac{5}{8}$	24.8	T. cwt. qr. lb. 2 15 0 12	6,172	23.0	T. cwt. qr. lb. 2 11 0 12	5,724	23.8	T. cwt. qr. lb. 2 12 3 15	5,923
2 $\frac{1}{4}$	$\frac{23}{32}$	31.2	3 9 1 9	7,765	28.6	3 3 2 6	7,118	30.6	3 8 0 0	7,616
2 $\frac{1}{2}$	$\frac{13}{16}$	38.2	4 4 3 15	9,507	34.8	3 17 1 9	8,661	36.2	4 0 1 21	9,009
2 $\frac{3}{4}$	$\frac{7}{8}$	45.8	5 1 3 3	11,399	43.2	4 16 0 0	10,752	44.6	4 19 0 12	11,100
3	$\frac{15}{16}$	57.8	6 8 1 21	14,385	50.8	5 12 3 15	12,643	53.8	5 19 2 6	13,390

Table No. 34.—Double-wire-rope Strops.

TABLE OF BREAKING-LOADS AND CORRESPONDING SAFE-WORKING LOADS FOR DOUBLE STROPS WITH A THIMBLE IN EACH END AND MADE OF GALVANIZED-STEEL-WIRE ROPE OF HAWSER BASIC QUALITY OF THE BREAKING-LOAD SPECIFIED IN TABLE 3.)

(Strop loaded as shown in Diagram No. 7.)

Two Ropes each of Size		Strands and Wires 6/12.			Strands and Wires 6/24.			Strands and Wires 6/30.		
Circumference, in Inches.	Diameter, in Inches.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.	Breaking-load, in Tons.	Working-load, in Tons, &c.	Working-load, in Pounds.
2	$\frac{5}{8}$	16.6	T. cwt. qr. lb. 1 16 3 16	4,132	22.4	T. cwt. qr. lb. 2 9 3 3	5,575	20.0	T. cwt. qr. lb. 2 4 1 22	4,978
2 $\frac{1}{4}$	$\frac{23}{32}$	21.6	2 8 0 0	5,376	29.4	3 5 1 9	7,317	25.6	2 16 3 16	6,372
2 $\frac{1}{2}$	$\frac{13}{16}$	26.4	2 18 2 19	6,571	35.4	3 18 2 19	8,811	30.4	3 7 2 6	7,566
2 $\frac{3}{4}$	$\frac{7}{8}$	30.4	3 7 2 6	7,566	42.2	4 13 3 3	10,503	39.2	4 7 0 12	9,756
3	$\frac{15}{16}$	37.2	4 2 2 18	9,258	51.4	5 14 0 25	12,793	47.0	5 4 1 22	11,698

Table No. 35.—Fibre-rope Yard-arms and Coal-whips (Ordinary Grade).

TABLE OF SAFE-WORKING LOADS FOR ORDINARY-GRADE ROUND FIBRE ROPES WHEN NEW AND WHEN USED FOR YARD-ARMS OR COAL-WHIPS, AND WHEN THE LOAD IS CARRIED ON A SINGLE PART (DIAGRAM No. 9).

(Ropes to be closely spun and not tarred.)

Size of Rope.				Size of Rope.			
Circumference, in Inches.	Diameter, in Inches (approximate).	Breaking-load, Pounds.	Working-load, Tons, &c.	Circumference, in Inches.	Diameter, in Inches.	Breaking-load, Pounds.	Working-load, Tons, &c.
1½	9/16	2,466	T. cwt. qr. lb. 0 3 2 19	3½	1 1/8	9,882	T. cwt. qr. lb. 0 14 2 23
2	5/8	3,222	0 4 3 5	3¾	1 3/16	11,340	0 16 3 14
2¼	23/32	4,086	0 6 0 9	4	1 1/8	12,906	0 19 0 23
2½	13/16	5,040	0 7 2 0	4¼	1 1/4	14,565	1 1 2 19
2¾	7/8	6,102	0 9 0 9	4½	1 1/2	16,326	1 4 1 5
3	15/16	7,254	0 10 3 5	4¾	1 5/8	18,195	1 7 0 8
3½	1 1/32	8,514	0 12 2 19	5	1 9/32	20,160	1 10 0 0

Table No. 36.—Fibre-rope Yard-arms and Coal-whips (Higher Grade).

TABLE OF SAFE-WORKING LOADS FOR HIGHER-GRADE ROUND FIBRE ROPES WHEN NEW AND WHEN USED FOR YARD-ARMS OR COAL-WHIPS, AND WHEN THE LOAD IS CARRIED ON A SINGLE PART (DIAGRAM No. 9).

(Ropes to be closely spun and not tarred. Grade to be distinguished by a red thread spun into the centre of one strand.)

Size of Rope.				Size of Rope.			
Circumference, in Inches.	Diameter, in Inches (approximate).	Breaking-load, Pounds.	Working-load, Tons, &c.	Circumference, in Inches.	Diameter, in Inches (approximate).	Breaking-load, Pounds.	Working-load, Tons, &c.
1½	9/16	3,082	T. cwt. qr. lb. 0 4 2 10	3½	1 1/8	12,352	T. cwt. qr. lb. 0 18 1 15
2	5/8	4,027	0 5 3 27	3¾	1 3/16	14,175	1 1 0 10
2¼	23/32	5,107	0 7 2 11	4	1 1/8	16,132	1 4 0 1
2½	13/16	6,300	0 9 1 14	4¼	1 1/4	18,206	1 7 0 10
2¾	7/8	7,627	0 11 1 11	4½	1 1/2	20,407	1 10 1 13
3	15/16	9,067	0 13 1 27	4¾	1 5/8	22,744	1 13 3 10
3½	1 1/32	10,642	0 15 3 10	5	1 9/32	25,200	1 17 2 0

**Table No. 37.—Fibre-rope Yard-arms, Coal-whips, Span-purchases, and Guys (Ordinary Grade).**

TABLE OF SAFE-WORKING LOADS FOR ORDINARY-GRADE ROUND FIBRE ROPES WHEN NEW AND WHEN USED FOR YARD-ARMS, COAL-WHIPS, SPAN-PURCHASES, OR GUYS, AND WHEN THE LOAD IS CARRIED ON TWO PARTS (DIAGRAM No. 10).

(Ropes to be closely spun and not tarred.)

Size of Rope.		Working-load, in Tons, &c.	Working-load, in Pounds.	Size of Rope.		Working-load, in Tons, &c.	Working-load, in Pounds.
Circumference, in Inches.	Diameter, in Inches (approx.).			Circumference, in Inches.	Diameter, in Inches (approx.).		
3½	1⅛	T. cwt. qr. lb.		4½	17/16	T. cwt. qr. lb.	
3¾	1⅜	1 9 1 18	3,294	4¾	1½	2 8 2 10	5,442
4	1⅝	1 13 3 0	3,780	5	1⅞	2 14 0 16	6,064
4¼	1⅞	1 18 1 18	4,302			3 0 0 0	6,720
		2 3 1 10	4,854				

**Table No. 38.—Fibre-rope Yard-arms, Coal-whips, Span-purchases, and Guys (Higher Grade.)**

TABLE OF SAFE-WORKING LOADS FOR HIGHER-GRADE ROUND FIBRE ROPES WHEN NEW AND WHEN USED FOR YARD-ARMS, COAL-WHIPS, SPAN-PURCHASES OR GUYS, AND WHEN THE LOAD IS CARRIED ON TWO PARTS (DIAGRAM No. 10).

(Ropes to be closely spun and not tarred. Grade to be distinguished by a red thread spun into the centre of one strand.)

Size of Rope.		Working-load, in Tons, &c.	Working-load, in Pounds.	Size of Rope.		Working-load, in Tons, &c.	Working load, in Pounds.
Circumference, in Inches.	Diameter, in Inches (approx.).			Circumference, in Inches.	Diameter, in Inches (approx.).		
2¼	23/32	T. cwt. qr. lb.		3¾	13/16	T. cwt. qr. lb.	
2½	13/16	0 15 0 22	1,702	4	19/32	2 2 0 20	4,724
2¾	7/8	0 18 3 0	2,100	4¼	1⅞	2 8 0 2	5,378
3	15/16	1 2 2 22	2,542	4½	17/16	2 14 0 20	6,068
3¼	1⅞	1 6 3 26	3,022	4¾	1⅞	3 0 2 26	6,802
3½	1⅞	1 11 2 20	3,548	5	1⅞	3 7 2 20	7,580
3¾	1⅞	1 16 3 2	4,118			3 15 0 0	8,400

Table No. 39.—Fibre-rope Slings (Ordinary Grade).

TABLE OF SAFE-WORKING LOADS FOR FIBRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING.

(Rope of ordinary grade, closely spun, and not tarred, and to withstand a breaking-load not less than the breaking-load specified in Table 4 (1).)









Size of Rope.									
Circumference, in Inches.	Diameter, in Inches (approx.).	Legs parallel.		B = L.		B = 1 1/2 L.		B = 1 1/2 L.	
		Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.
1	5/16	202	0 1 3 6	175	0 1 2 7	134	0 1 0 22	98	0 0 3 14
1 1/4	13/32	315	0 2 3 7	272	0 2 1 20	208	0 1 3 12	152	0 1 1 12
1 1/2	15/32	454	0 4 0 6	393	0 3 2 1	300	0 2 2 20	220	0 1 3 24
2	9/16	616	0 5 2 0	534	0 4 3 2	407	0 3 2 15	298	0 2 2 18
2 1/4	5/8	805	0 7 0 21	697	0 6 0 25	532	0 4 3 0	389	0 3 1 25
2 1/2	23/32	1,021	0 9 0 13	884	0 7 3 16	675	0 6 0 3	494	0 4 1 18
2 3/4	13/16	1,260	0 11 1 0	1,091	0 9 2 27	833	0 7 1 21	610	0 5 1 22
3	7/8	1,525	0 13 2 13	1,321	0 11 3 5	1,009	0 9 0 1	738	0 6 2 10
3 1/4	15/16	1,813	0 16 0 21	1,570	0 14 0 2	1,199	0 10 2 23	878	0 7 3 10
3 1/2	1 1/32	2,128	0 19 0 0	1,843	0 16 1 23	1,407	0 12 2 7	1,030	0 9 0 22
3 3/4	1 1/8	2,470	1 2 0 6	2,139	0 19 0 11	1,634	0 14 2 10	1,196	0 10 2 20
4	1 1/16	2,835	1 5 1 7	2,455	1 1 3 19	1,875	0 16 2 27	1,372	0 12 1 0
4 1/4	1 1/8	3,226	1 8 3 6	2,794	1 4 3 22	2,134	0 19 0 6	1,562	0 13 3 22
4 1/2	1 1/4	3,641	1 12 2 1	3,153	1 8 0 17	2,408	1 1 2 0	1,762	0 15 2 26
4 3/4	1 1/2	4,081	1 16 1 21	3,534	1 11 2 6	2,699	1 4 0 11	1,975	0 17 2 15
5	1 1/2	4,548	2 0 2 12	3,939	1 15 0 19	3,008	1 6 3 12	2,202	0 19 2 18
5 1/4	1 3/4	5,040	2 5 0 0	4,364	1 18 3 24	3,333	1 9 3 1	2,439	1 1 3 3
5 1/2	1 3/4	6,097	2 14 1 21	5,280	2 7 0 16	4,033	1 16 0 1	2,951	1 6 1 11
6	1 23/32	7,258	3 4 3 6	6,286	2 16 0 14	4,801	2 2 3 13	3,514	1 11 1 14

Table No. 40.—Fibre-rope Slings (Higher Grade).

TABLE OF SAFE-WORKING LOADS FOR FIBRE-ROPE SLINGS ON WHICH THE LOAD IS CARRIED ON TWO PARTS OR LEGS OF THE SLING.

(Rope of higher grade, closely spun, and not tarred, and to withstand a breaking-load not less than the breaking-load specified in Table 5 (2). Rope to be distinguished by a red thread spun into the centre of one strand).

Size of Rope.									
Circumference, in Inches.	Diameter, in Inches (approx.).	Legs parallel.		B = L.		B = 1 1/2 L.		B = 1 1/2 L.	
		Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.	Working-load, in Pounds.	Working-load, in Tons, &c.
1 1/2	9/16	770	0 6 3 14	667	0 5 3 23	509	0 4 2 5	372	0 3 1 8
2	5/8	1,006	0 8 3 26	871	0 7 3 3	665	0 5 3 21	486	0 4 1 10
2 1/4	23/32	1,276	0 11 1 16	1,105	0 9 3 13	844	0 7 2 4	617	0 5 2 1
2 1/2	13/16	1,575	0 14 0 7	1,364	0 12 0 20	1,041	0 9 1 5	762	0 6 3 6
2 3/4	7/8	1,906	0 17 0 2	1,651	0 14 2 27	1,261	0 11 1 1	922	0 8 0 26
3	15/16	2,266	1 0 0 26	1,962	0 17 2 2	1,499	0 13 1 15	1,097	0 9 3 5
3 1/4	1 1/32	2,660	1 3 3 0	2,304	1 0 2 8	1,759	0 15 2 23	1,287	0 11 1 27
3 1/2	1 1/8	3,087	1 7 2 7	2,674	1 3 3 14	2,042	0 18 0 26	1,495	0 13 1 11
3 3/4	1 1/8	3,544	1 11 2 16	3,069	1 7 1 17	2,344	1 0 3 20	1,715	0 15 1 7
4	1 1/16	4,032	1 16 0 0	3,492	1 11 0 20	2,667	1 3 3 7	1,952	0 17 1 20
4 1/4	1 1/4	4,551	2 0 2 15	3,941	1 15 0 21	3,010	1 6 3 14	2,202	0 19 2 18
4 1/2	1 1/2	5,101	2 5 2 5	4,417	1 19 1 21	3,374	1 10 0 14	2,469	1 2 0 5
4 3/4	1 3/4	5,685	2 10 3 1	4,924	2 3 3 24	3,760	1 13 2 8	2,752	1 4 2 8
5	1 19/32	6,300	2 16 1 0	5,455	2 8 2 23	4,166	1 17 0 22	3,049	1 7 0 25

FOURTH SCHEDULE.

Diagrams.

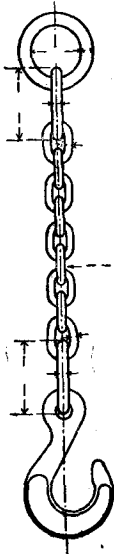


DIAGRAM NO. 1.

**Diagram No. 1.—Single-chain Sling.**

With this class of sling, when the load is secured by the passing of the hook end around it and the hook is hooked on to the chain, the load is carried on a single part. (See Diagram No. 15.)

The safe-working load is shown in Table No. 6.

When the hook of the sling, instead of being hooked over the chain, is hooked on to the shackle or hook of the crane-chain, the load is carried on two parts. (See Diagram No. 6.)

The safe-working load is shown in Table No. 2.

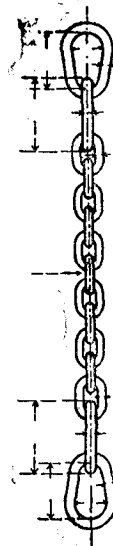


DIAGRAM NO. 2.

**Diagram No. 2.—Collar-chain Sling.**

When this sling is used similarly to the wire-rope sling shown in Diagram No. 15, the safe loads will be found in Table No. 6.

When the sling is used as shown in Diagram No. 16, the safe loads will be found in Table No. 7.

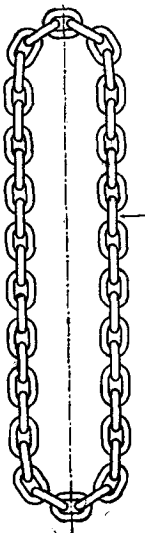


DIAGRAM NO. 3.

**Diagram No. 3.—Endless-chain Sling.**

When this sling is used as shown in Diagram No. 18 the load is carried on two parts. The safe-working loads are shown in Table No. 7.

**Diagram No. 4.—Double-chain Sling.**

With this sling the load is generally carried on the two legs of the sling. The greater the spread between the legs, the lesser the safe-working load. Tables of safe-working loads are Tables Nos. 7 and 8.

For similar slings of wire rope, see Tables Nos. 21 and 22.

For fibre-rope slings see Tables Nos. 39 and 40.

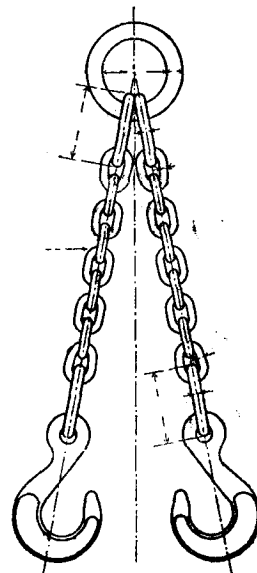
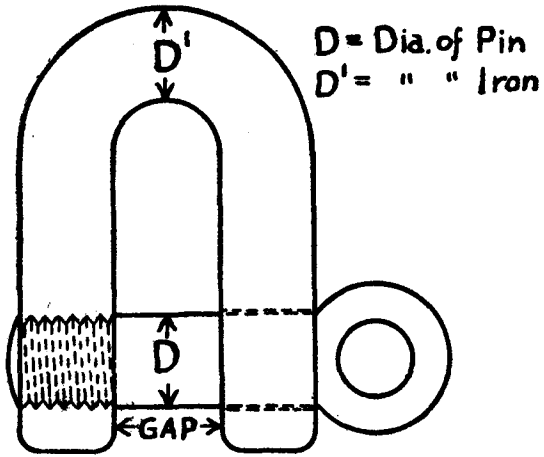
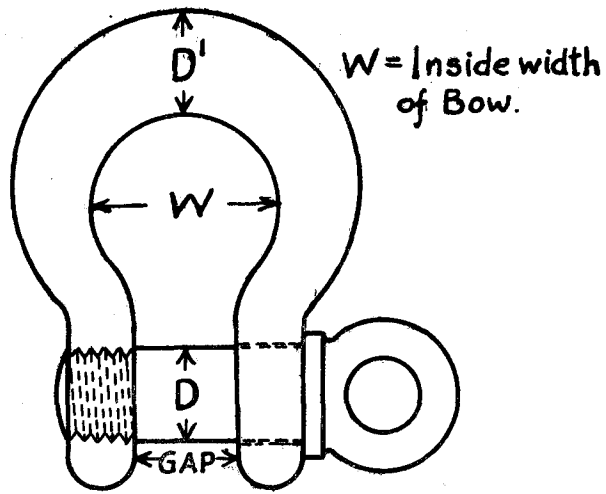


DIAGRAM NO. 4.



D SHACKLE.

DIAGRAM No. 5. (Tables 14, 15, and 16.)



BOW SHACKLE.

DIAGRAM No. 6. (Table No. 17.)



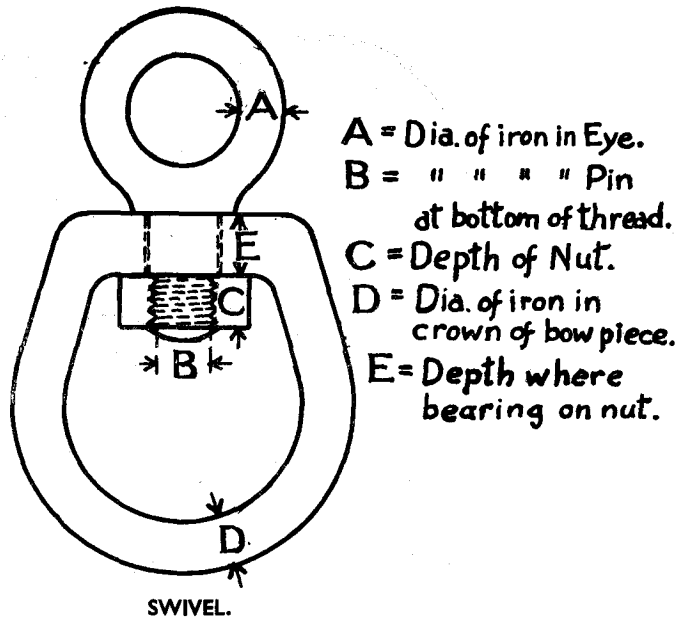


DIAGRAM 7. (Table 18.)

*Method of Measuring Circumference of Wire Rope.*—The circumference of a wire rope shall be measured at three places at least five ft. apart, with a suitable device such as a rope caliper as shown in the diagram. The average of these measurements shall be the circumference of the rope.

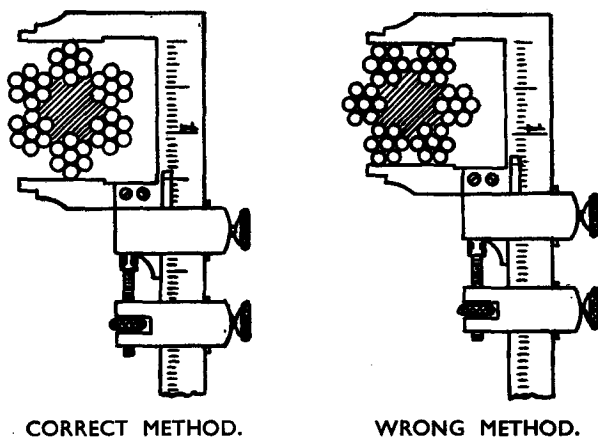


DIAGRAM 8.

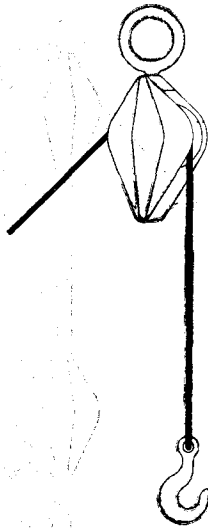


DIAGRAM No. 9.

**Diagram No. 9.**

The load is carried on a single part of the rope.

For safe-working loads see Table No. 6 (chain), Tables Nos. 19 and 20 (wire rope), Tables Nos. 35 and 36 (fibre rope).

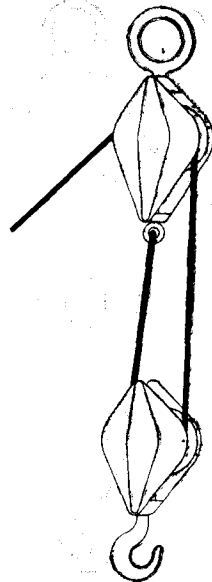


DIAGRAM No. 10.

**Diagram No. 10.**

The load is carried on two parts of the rope.

For safe-working loads see Tables Nos. 23 and 28 (wire rope), Tables Nos. 37 and 38 (fibre rope).

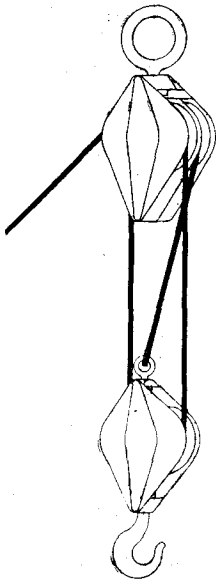


DIAGRAM No. 11.

**Diagram No. 11.**

The load is carried on three parts of the rope.

For safe-working loads see Tables Nos. 24 and 29.

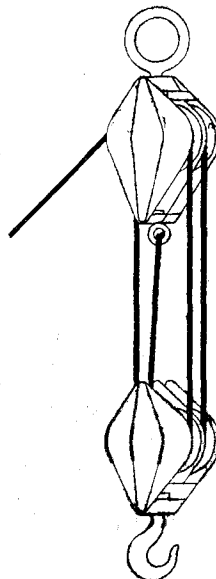


DIAGRAM No. 12.

**Diagram No. 12.**

The load is carried on four parts of the rope.

For safe-working loads see Tables Nos. 25 and 30.

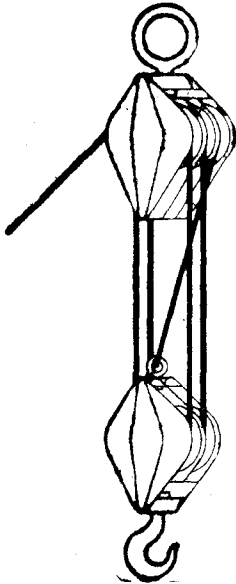


DIAGRAM No. 13.

**Diagram No. 13.**

The load is carried on five parts of the rope.  
For safe - working loads see Tables Nos. 26 and 31.

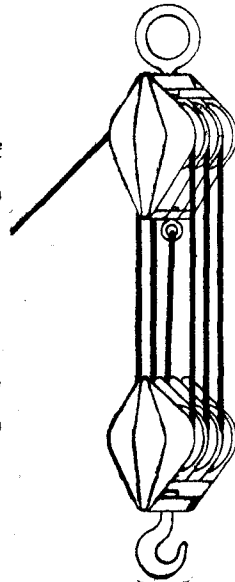


DIAGRAM No. 14.

**Diagram No. 14.**

The load is carried on six parts of the rope.  
For safe - working loads see Tables Nos. 27 and 32.

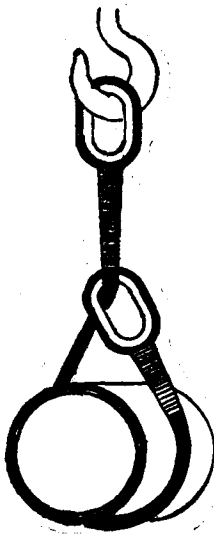


DIAGRAM No. 15.

**Diagram No. 15.—Single-wire-rope Sling or Snorter.**

The load is carried on a single part.  
Safe loads are given in Tables Nos. 19 and 20.

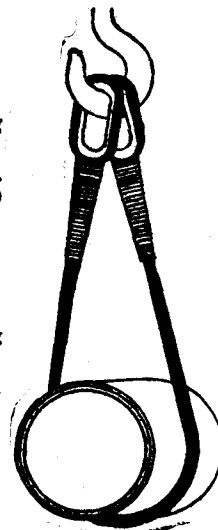


DIAGRAM No. 16.

**Diagram No. 16.—Single-wire-rope Sling carrying the Load on Two Parts.**

Safe loads are given in Tables Nos. 21 and 22.

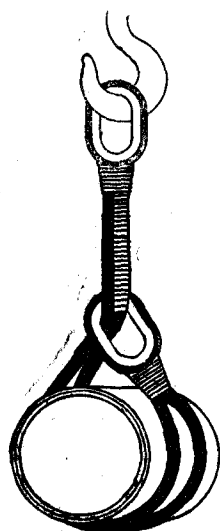


DIAGRAM No. 17.

Diagram No. 17.—Double-wire-rope Strop carrying the Load on a Single Part.

Safe loads are given in Tables Nos. 33 and 34.

Diagram No. 18.—Endless-fibre-rope Sling.

When the load is slung as shown in the diagram, there are two parts of the rope carrying the load.

The safe-working loads are shown in Tables Nos. 39 and 40.

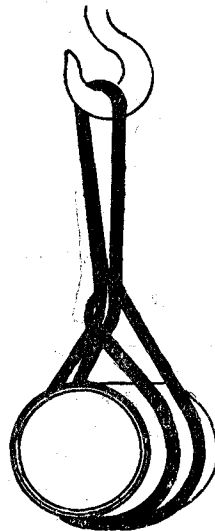


DIAGRAM No. 18.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

*Extending the Open Season for the taking or killing of Opossums, South Canterbury Acclimatization District.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present :

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers and authorities conferred on him by the Animals Protection and Game Act, 1921-22, and of all other powers and authorities enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby amend the Order in Council made under the said Act, dated the thirteenth day of May, one thousand nine hundred and thirty-five, and appearing in *New Zealand Gazette* No. 36 of the sixteenth idem, at page 1311, by deleting the words "1st July" appearing under the heading "South Canterbury Acclimatization District" in the Schedule to such Order in Council, and contained in condition No. 1 under the said heading, and by inserting in lieu thereof the words "15th July": And all licenses issued to take or kill opossums in the South Canterbury Acclimatization District under the authority of the said Order in Council are hereby extended until noon on the said fifteenth day of July, one thousand nine hundred and thirty-five.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(I.A. 1933/25/13.)

*Setting aside Native Land as a Native Reservation.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present :

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by section two hundred and ninety-eight of the Native Land Act, 1931, it is enacted, *inter alia*, that when any Native freehold land is owned at law or in equity by more than ten owners in common the Governor-General may, by Order in Council, set apart and reserve any part of that land for the common use of the owners thereof as in the said Act provided :

And whereas the Native Land Court has recommended that the land described in the Schedule hereto be set apart as a Native reservation :

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, in pursuance and exercise of the power and authority hereinbefore mentioned, and all

H

other powers thereunto him enabling, and acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby set apart and reserve the Native freehold land described in the Schedule hereto for the common use of the owners thereof as a burial-ground, also as a landing and meeting place.

SCHEDULE.

BLOCK XII, OPUNAKE SURVEY DISTRICT.

ALL that area of land situate in the Aotea Native Land Court District, called or known as Orimupiko No. 1 Block, containing 8 acres 3 roods 24 perches, more or less, and being the whole of the land comprised in a partition order of the Native Land Court dated the 14th May, 1915.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

*Reciprocal Application of Workers' Compensation Act, 1922, to Irish Free State.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present :

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by section fifty-nine of the Workers' Compensation Act, 1922, it is enacted that where the Governor-General is satisfied that by the laws of any other country within the Dominions of the Crown compensation for accidents is payable to the relatives of a deceased worker although they are resident in New Zealand, he may, by Order in Council, declare that relatives resident in that country shall have the same rights and remedies under that Act as if resident in New Zealand :

And whereas by Order in Council dated the twenty-fourth day of October, one thousand nine hundred and ten, and made under section fifty-three of the Workers' Compensation Act, 1908, but enuring under section fifty-nine of the Workers' Compensation Act, 1922, it was declared, *inter alia*, that relatives of a deceased worker resident in the United Kingdom of Great Britain and Ireland should have the same rights and remedies under the Workers' Compensation Act, 1908, as if resident in New Zealand :

And whereas doubts have arisen whether relatives of a deceased worker resident in the territory now comprising the Irish Free State have the same rights and remedies under the Workers' Compensation Act, 1922, as if resident in New Zealand :

And whereas it is expedient that such doubts should be resolved :

And whereas the Governor-General is satisfied that by the laws of the Irish Free State compensation for accidents is payable to the relatives of a deceased worker, although they are resident in New Zealand:

Now, therefore, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in exercise of the powers conferred on him by section fifty-nine of the Workers' Compensation Act, 1922, doth hereby declare that relatives of a deceased worker resident in the Irish Free State shall have the same rights and remedies under the Workers' Compensation Act, 1922, as if resident in New Zealand.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

*The Eastern Sides of Portions of Mudie Street and Tama Street, in the Borough of Lower Hutt, exempted from the Provisions of Section 128 of the Public Works Act, 1928, subject to a Condition as to the Building-line.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by the Public Works Act, 1928, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby approve of the following resolution passed by the Lower Hutt Borough Council on the tenth day of June, one thousand nine hundred and thirty-five, viz.:-

"That the Lower Hutt Borough Council, being the local authority in whom the fee-simple of all streets in the borough is vested, hereby declares that the provisions of section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply along the Mudie and Tama Streets frontages of land owned by Mrs. Mary Jane Routley, being part D.P. 5483, and part Section 21, Hutt Registration District, as shown on the plan attached hereto";

subject to the condition that no building or part of a building shall at any time be erected on the land fronting the eastern sides of the portions of Mudie Street and Tama Street (described in the Schedule hereto) within a distance of thirty-three feet from the centre-lines of the said portions of streets.

SCHEDULE.

THE eastern side of all that portion of street, situated in the Wellington Land District, Borough of Lower Hutt, known as Mudie Street, fronting part of the land shown on D.P. 5483, being part Section 21, Hutt R.D.

Also the eastern side of all that portion of street in the said land district and borough known as Tama Street, fronting part of the land shown on D.P. 5483, being part Section 21, Hutt R.D.

As the said portions of streets are more particularly delineated on the plan marked P.W.D. 89707, deposited in the office of the Minister of Public Works at Wellington, and thereon coloured red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 51/644.)

*The Eastern Side of Portion of Royal Terrace, in the Borough of West Harbour, exempted from the Provisions of Section 128 of the Public Works Act, 1928, subject to a Condition as to the Building-line.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by the Public Works Act, 1928, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of

the said Dominion, doth hereby approve of the following resolution passed by the West Harbour Borough Council on the fourth day of June, one thousand nine hundred and thirty-five, viz.:-

"That the West Harbour Borough Council, being the local authority having control of the streets in the West Harbour Borough, by resolution declares that the provisions of section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply to portion of the eastern side of Royal Terrace, in the said West Harbour Borough, where such portion of the street abuts Allotment 43, Township of Rothesay";

subject to the condition that no building or part of a building shall at any time be erected on the land fronting the eastern side of the portion of Royal Terrace (described in the Schedule hereto) within a distance of thirty-three feet from the centre-line of the said portion of street.

SCHEDULE.

THE eastern side of all that portion of street, situated in the Otago Land District, Borough of West Harbour, known as Royal Terrace, fronting Allotment 43, Township of Rothesay. As the said portion of street is more particularly delineated on the plan marked P.W.D. 89693, deposited in the office of the Minister of Public Works at Wellington, and thereon edged red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 51/1843.)

*The Western Side of Portion of York Street (Oxford Township), in the County of Oxford, exempted from the Provisions of Section 128 of the Public Works Act, 1928, subject to a Condition as to the Building-line.*

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by the Public Works Act, 1928, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby approve of the following resolution passed by the Oxford County Council on the seventh day of May, one thousand nine hundred and thirty-five, viz.:-

"The Oxford County Council, being the local authority having control of the streets and roads in Block VIII of the Oxford Survey District, by resolution declares that the provisions of section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply to that portion of the street known as York Street, adjoining all that parcel of land containing 1 rood 7.5 perches, situated in Block VIII of the Oxford Survey District, and being part of Rural Section 1750, and being the whole of the land comprised in Certificate of Title, Volume 378, folio 34, Canterbury Land Registry;"

subject to the condition that no building or part of a building shall at any time be erected on the land fronting the western side of the portion of York Street (described in the Schedule hereto) within a distance of thirty-three feet from the centre-line of the said portion of road.

SCHEDULE.

THE western side of all that portion of road, situated in the Canterbury Land District, County of Oxford, known as York Street, fronting part Rural Section 1750, Block VIII, Oxford Survey District, being all of the land comprised in Certificate of Title, Volume 378, folio 34, Christchurch Registry. As the said portion of road is more particularly delineated on the plan marked P.W.D. 89770, deposited in the office of the Minister of Public Works at Wellington, and thereon coloured red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 51/2002.)

*The South-western Side of Portion of Lonsdale Street, in the City of Dunedin, exempted from the Provisions of Section 128 of the Public Works Act, 1928, subject to a Condition as to the Building-line.*

GALWAY, Governor-General.  
ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by the Public Works Act, 1928, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby approve of the following resolution passed by the Dunedin City Council on the tenth day of June, one thousand nine hundred and thirty-five, viz. :—

“That the Dunedin City Council, being the local authority having control of the streets in the City of Dunedin, by resolution declares that the provisions of section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply to portion of the south-western side of Lonsdale Street, in the said City of Dunedin, where such portion of street abuts on Lot 7, Block XI, Belleknowes Estate, as the said portion of street is more particularly shown on the plan annexed hereto and is thereon coloured brown and edged with red to its centre-line”;

subject to the condition that no building or part of a building shall at any time be erected on the land fronting the south-western side of the portion of Lonsdale Street (described in the Schedule hereto) within a distance of thirty-three feet from the centre-line of the said portion of street.

SCHEDULE.

THE south-western side of all that portion of street, situated in the Otago Land District, City of Dunedin, known as Lonsdale Street, fronting Allotment 7, Block XI, Belleknowes Estate. As the said portion of street is more particularly delineated on the plan marked P.W.D. 89714, deposited in the office of the Minister of Public Works at Wellington, and thereon edged red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 51/1393.)

*The South-eastern Side of Portion of Wairakei Street, in the City of Auckland and the Town District of Ellerslie, exempted from the Provisions of Section 128 of the Public Works Act, 1928, subject to a Condition as to the Building-line.*

GALWAY, Governor-General.  
ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by the Public Works Act, 1928, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby approve of the following resolutions passed by the Auckland City Council and the Ellerslie Town Board on the sixth and eleventh days of June, one thousand nine hundred and thirty-five, respectively, viz. :—

“The Auckland City Council, being the local authority having control of the streets in the City of Auckland, by resolution declares that the provisions of section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply to that portion of Wairakei Street adjoining part of Lot 35, D.P. 293, being part of Allotment 7 of Section 12, Suburbs of Auckland, and Lot 36, D.P. 293, of part Allotments 7 and 59, Section 12, Suburbs of Auckland;

“That the Ellerslie Town Board, being the local authority having control of the streets within the Town District of Ellerslie, by resolution declares that the provisions of

section one hundred and twenty-eight of the Public Works Act, 1928, shall not apply to that portion of street known as Wairakei Street, Ellerslie, adjoining that piece of land being part of Lot 36, D.P. 293, being part of Allotments 7 and 59 of 12, Suburbs of Auckland”;

subject to the condition that no building or part of a building shall at any time be erected on the land fronting the south-eastern side of the portion of Wairakei Street (described in the Schedule hereto) within a distance of thirty-three feet from the centre-line of the said portion of street.

SCHEDULE.

THE south-eastern side of all that portion of street, situated in the North Auckland Land District, City of Auckland and Town District of Ellerslie, known as Wairakei Street, fronting part Lot 35 and Lot 36, D.P. 293, being parts Allotments 7 and 59 of Section 12, Suburbs of Auckland. As the said portion of street is more particularly delineated on the plan marked P.W.D. 89330, deposited in the office of the Minister of Public Works at Wellington, and thereon coloured red.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(P.W. 34/1624.)

*Validating Loans Conversion Proceedings of Wairoa Borough Council.*

GALWAY, Governor-General.  
ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 3rd day of July, 1935.

Present:

THE HON. SIR ALFRED RANSOM PRESIDING IN COUNCIL.

WHEREAS by an Order in Council known as the Wairoa Borough Loans Conversion Order, 1934, dated the twenty-fifth day of January, one thousand nine hundred and thirty-four, and published in the *Gazette* of the first day of February, one thousand nine hundred and thirty-four, at page 140 thereof, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, and in pursuance and exercise of the powers and authorities conferred on him by the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33 (hereinafter called “the said Act”), did consent to the issue by the Wairoa Borough Council (hereinafter called “the said Council”) of new securities in conversion of any existing securities to which the said Order applies, and did thereby make the provisions contained in the said Order in Council:

And whereas by a resolution passed at a special meeting of the said Council and confirmed at a subsequent meeting held not sooner than fourteen days after the day of such special meeting, the said Council resolved to issue new securities in conversion of the existing securities to which the said Order applies, but the public notice of the place and date fixed for such subsequent meeting and of the purpose of the resolution to be confirmed thereat was not given in the period intervening between the two meetings twice or more as required by subsection two of section nine of the said Act:

And whereas it is desirable to validate the proceedings affected by the said omission to give such notice at least twice:

Now, therefore, in pursuance and exercise of the powers and authorities conferred on him by section two of the Local Authorities Interest Reduction and Loans Conversion Amendment Act, 1934, and of all other powers and authorities enabling him in that behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth hereby order and declare that the proceedings of the said Council in connection with the said resolution and the said notice shall be valid to all intents and purposes as though the public notice under subsection two of section nine of the said Act had been published at least twice, and that neither the said proceedings nor any new securities issued by the said Council shall hereafter be questioned in any Court on the ground of any such omission aforesaid.

A. W. MULLIGAN,  
Acting Clerk of the Executive Council.

(T. 49/379/5.)

*Lands permanently reserved.*

GALWAY, Governor-General.

WHEREAS by the three-hundred-and-fifty-ninth section of the Land Act, 1924, it is enacted that the Governor-General may from time to time set apart temporarily as reserves, notwithstanding that the same may be then held under pastoral license, any Crown lands which in his opinion are required for any of the purposes in the said section mentioned:

And whereas by the three-hundred-and-sixtieth section of the said Act it is provided that land temporarily reserved under the said three-hundred-and-fifty-ninth section may, at the expiration of one month but not later than six months after the publication in the *Gazette* of notice of such temporary reservation, be permanently reserved, and that notice of such permanent reservation shall be published in the *Gazette*:

And whereas the lands specified in the first column of the Schedule hereto were, by the Warrant the date of which is specified in the third column of the said Schedule, and the notification of which was published in the *Gazette* specified in the fourth column, temporarily reserved under the authority of the said Act for the purposes specified in the second column of the said Schedule:

Now, therefore, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers and authorities conferred upon me by the said Act, do hereby permanently reserve the lands so temporarily reserved as aforesaid, and enumerated in the first column of the Schedule hereto, for the purposes specified in the second column of the said Schedule, being the same purposes for which the said lands were so temporarily reserved as aforesaid.

## SCHEDULE.

First Column. DESCRIPTION OF RESERVES.					Second Column.	Third Column.	Fourth Column.
Land District.	Locality.	Section.	Block.	Area.	Purposes for which Land reserved.	Date of Warrant.	<i>Gazette</i> .
North Auckland	Kerikeri S.D.* ..	16	VI	1 0 37.6	Recreation ..	1935. 29 April	1935. No. 34, 2 May.
Ditto ..	Village of Papakura, Otahuhu S.D.	Allotment 5 of Section 6	XIV	3 2 20	" ..	" ..	" ..
" ..	Waipu Parish, Waipu S.D.	Allotment 528	VII	0 2 16	" ..	" ..	" ..
Gisborne ..	Waioeka Parish, Opotiki S.D.	Allotments 382 and 383	III	8 3 36	Gravel ..		
Taranaki ..	Cape S.D. ..	122	XII	0 3 10	Lighthouse ..	" ..	" ..
Wellington	Mangahao S.D. ..	40	I	100 3 0	Recreation ..	" ..	" ..
Marlborough	Cloudy Bay S.D. ..	71	XVI	0 3 21	River-protection ..	" ..	" ..
Canterbury	Culverden S.D. ..	Reserve 4348	VI	0 0 8	Police ..	" ..	" ..
Otago ..	Town of Hyde ..	18 and 22	VI	77 0 32.5	Gravel ..	" ..	" ..

\* Survey district.

As witness the hand of His Excellency the Governor-General, this 5th day of July, 1935.

(L. and S. 1/982.)

E. A. RANSOM, Minister of Lands.

*Amendment to Polling-place under Electoral Act, 1927.*

GALWAY, Governor-General.

IN pursuance and in exercise of the powers conferred upon me by the Electoral Act, 1927, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, do hereby amend the polling-place as shown against the electoral district the name of which is specified in the following Schedule.

## SCHEDULE.

LYTTELTON ELECTORAL DISTRICT.

CHATHAM Islands, Waitangi, old Post-office Building, to be altered to Chatham Islands, Waitangi, the Courthouse.

As witness the hand of His Excellency the Governor-General, this 5th day of July, 1935.

E. A. RANSOM,

Acting Minister in Charge of Electoral Department.

*Land temporarily reserved in the Wellington Land District for Recreation Purposes.*

GALWAY, Governor-General.

WHEREAS by the three-hundred-and-fifty-ninth section of the Land Act, 1924, it is enacted that the Governor-General may from time to time set apart temporarily as reserves, notwithstanding that the same may be then held under pastoral license, any Crown lands which in his opinion are required for any of the purposes in the said section mentioned:

Now, therefore, I, George Vere Arundell, Viscount Galway, Governor-General of the Dominion of New Zealand, in pursuance and exercise of the powers and authorities conferred upon me by the said Act, do hereby temporarily reserve the land in the Wellington Land District described in the Schedule hereunder written for recreation purposes.

## SCHEDULE.

WELLINGTON LAND DISTRICT.

ALL that area containing by admeasurement 29 acres 0 roods 27 perches, more or less, being part of Section 47, Harbour Registration District, situated in Block I, Pencarrow Survey District, and bounded as follows: Towards the north-east by Section 46 for a distance of 863 links; towards the east by other part of Section 47 for distances of 545.7 links and 1180.5 links; towards the south-east by other part of Section 47 for a distance of 2274.5 links; and towards the north-west by Sections 48 and 43 for distances of 1166.7 links and 1322.9 links respectively. As the same is more particularly delineated on the plan marked L. and S. 1/588, deposited in the Head Office, Department of Lands and Survey, at Wellington, and thereon bordered red.

As witness the hand of His Excellency the Governor-General, this 6th day of July, 1935.

E. A. RANSOM, Minister of Lands.

(L. and S. 1/588.)

*Savings-bank Officers appointed.*

The Treasury,

Wellington, 8th July, 1935.

HIS Excellency the Governor-General has been pleased to approve the appointment of the undermentioned officers to the Auckland Savings-bank:—

Name of Officer.	Appointment.	From
Frank Emanuel Sutherland	Manager ..	1st July, 1935.
Harold Graham ..	Assistant Manager	" ..
Frederick Percival Ennor ..	Accountant	" ..
John Beveridge Stevenson ..	Junior Clerk	" ..

ADAM HAMILTON, for Minister of Finance.

*Appointment in the Royal Naval Reserve (New Zealand Division).*

Navy Office,  
Wellington, 8th July, 1935.

**H**IS Excellency the Governor-General has been pleased to approve of the following appointment in the Royal Naval Reserve (New Zealand Division) :—

Robert Hugh O'Neill, as Probationary Lieutenant, R.N.R. (N.Z.D.), to date 29th July, 1935.

JOHN BITCHENER, for Minister of Defence.

*Appointment of Honorary Child Welfare Officers under the Child Welfare Act, 1925.*

Education Department,  
Wellington, 2nd July, 1935.

**I**N pursuance of section 2 of the Child Welfare Act, 1925, I, Sydney George Smith, Minister of Education, do hereby appoint the following persons as Honorary Child Welfare Officers for the purposes of the said Act for the period ending 31st December, 1935 :—

Name.	District.
Jenkin, Mrs. Florence Alice .. .. .	Opunake.
Bell, Reverend William .. .. .	Takaka.

S. G. SMITH, Minister of Education.

*Deputy Registrar of Marriages, &c., appointed.*

Registrar-General's Office,  
Wellington, 9th July, 1935.

**I**T is hereby notified that the undermentioned person has been appointed to be the Deputy of the Registrar of Marriages and of Births and Deaths for the district set opposite his name, viz. :—

Name.	District.
Walter Oswald Hawke .. .. .	Wairoa.

G. G. HODGKINS, Deputy Registrar-General.

*Appointments in the Public Service.*

Office of the Public Service Commissioner,  
Wellington, 3rd July, 1935.

**T**HE Acting Public Service Commissioner has made the following appointments in the Public Service :—

James Joseph William Pooley,

to be Clerk of the Magistrates' Court at Ashburton for the purposes of the Magistrates' Courts Act, 1928, and Local Patent Officer at Ashburton for the purposes of section 15 of the Patents, Designs, and Trade-marks Act, 1921-22, as from the 29th day of June, 1935.

Walter Oswald Hawke,

to be Deputy Registrar of Births and Deaths of Maoris at Wairoa, as from the 20th day of June, 1935.

Hugh Brownlie,

to be Deputy Registrar of Births and Deaths of Maoris at Takaka, as from the 28th day of June, 1935.

Francois James Ness,

to be Registrar of Births and Deaths of Maoris at Rotokawa, as from the 1st day of July, 1935.

Joseph Moyle Treloar,

to be Deputy Registrar of Births and Deaths of Maoris at Putaruru, as from the 27th day of June, 1935.

John McKay Robb,

to be Deputy Registrar of Births and Deaths of Maoris at Greytown, as from the 2nd day of July, 1935.

John Henry Dark,

to be Registrar of Marriages and Registrar of Births and Deaths for the District of Denniston, as from the 28th day of June, 1935.

Edwin Dudley Good, Esquire,

to be Chief Inspector of Distilleries for the purposes of section 3 of the Distillation Act, 1908, as from the 1st day of May, 1935.

T. MARK, Secretary.

*Nga Komiti Marae i Whakaturia e te Kaunihera Maori mo te Takiwa o Tamatea.—(H.K.M. 23.)*

Poneke, 3 o Hurae, 1935.

**H**E whakaatu tenei ki a katoa i runga i te whakahaerenga o nga tikanga o tekiona 5 (1) o te Ture Whakatikatika i te Ture Kaunihera Maori, 1903, kua whakaturia e te Kaunihera Maori mo te Takiwa o Tamatea hei Komiti Marae mo nga kainga e huaina i raro ake nei nga tangata e mau ake nei nga ingoa.

KUPU APITI.

KAUNIHERA MAORI O TE TAKIWA O TAMATEA.

- |                                                                                                                                  |                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Komiti Marae o Waiwoheke—<br>Tui Tareha (Tiamana).<br>Adam Kawhe.<br>Rapihana.<br>Waitaringa Mapu.<br>Hata Kerei.                | Komiti Marae o Wharerangi—<br>Nirai Aporo (Tiamana).<br>Tarati te Hoata.<br>Rapata Haraki.<br>Pera Karaha.<br>Whakaroto te Hoata. |
| Komiti Marae o Moteo—<br>Paora Kurupo (Tiamana).<br>Naomi Aporo Horiana.<br>Mrs. C. Hill.<br>Merata Kurupo.<br>Taraipine Rawiri. | Komiti Marae o Tangoio—<br>Toko Eparaima (Tiamana).<br>Te Irimanuka.<br>Hami Tutu.<br>Te Aturangi Pera.<br>C. Ransfield.          |
| Komiti Marae o Omahu—<br>Hapeta Tiopira (Tiamana).<br>Hoani Hakiwai.<br>Lundon Kelly.<br>Jury Raurimu.<br>Dusky Pineaha.         | Komiti Marae o Waimarama—<br>Miki Thomas (Tiamana).<br>Turei Haronga.<br>Tame Karetu.<br>Wi Gillies.<br>Mita August.              |
| Komiti Marae o Kohupatiki—<br>Geo. Chadwick (Tiamana).<br>Harry Spooner.<br>Henry Bennett.<br>Tom Chadwick.<br>Wiremu Broughton. | Komiti Marae o Porangahau—<br>Ieni Ropiha (Tiamana).<br>Taketake Matua.<br>Heta Kani.<br>Tere Kuru.<br>H. T. Hutana.              |
| Komiti Marae o Te Hauke—<br>Timi Ruihi (Tiamana).<br>Tawhi Kara.<br>Niania Wirihana.<br>Dickie Ellison.<br>Tiopira Hapi.         | Komiti Marae o Takapau—<br>Hori Heperi (Tiamana).<br>Pehimana Hanita.<br>Matoha Heperi.<br>E. Chadwick.<br>V. Maaka.              |
| Komiti Marae o Paki Paki—<br>W. H. Puhara (Tiamana).<br>Hakopa Moa.<br>Wi Kani.<br>Paneta Hone.<br>James Russell.                | Komiti Marae o Waipawa—<br>Pura Logan (Tiamana).<br>Te Atua Ropiha.<br>Tuati Meha.<br>Wi Waaka.<br>Rangi Ropiha.                  |
| Komiti Marae o Korongata—<br>Hemi Puriri (Tiamana).<br>Geo. Randel.<br>C. Harrison.<br>Pita Erueti.<br>Sidney Crawford.          |                                                                                                                                   |

M. H. WATT, Tumuaki o te Ora.

*Classification of Christchurch-Dunedin Main Highway.*

**I**N pursuance and exercise of the powers conferred on me by the Transport Department Act, 1929, and the Heavy Motor-vehicle Regulations, 1932, I, James Alexander Young, Acting Minister of Transport, do hereby approve of the Main Highways Board's proposed classification and proposed alteration in classification of the road described in the Schedule hereto and situated in Springs, Ellesmere, and Selwyn Counties.

SCHEDULE.

SPRINGS, ELLESMERE, AND SELWYN COUNTIES.

ROAD classified in Class Three : Available for the use thereon of any heavy motor-vehicle (other than a multi-axled motor-vehicle) which, with the load it is carrying, weighs not more than 6½ tons, or any multi-axled heavy motor-vehicle which, with the load it is carrying, weighs not more than 10 tons :—

Christchurch-Dunedin Main Highway No. 101 (all that portion from a point opposite the Rolleston Railway station to the north-eastern boundary of Ashburton County).

Dated at Wellington, this 8th day of July, 1935.

J. A. YOUNG, Acting Minister of Transport.  
(TT. 10/197.)



*Approving of Testing Officers under the Motor-drivers' Regulations, 1931.*

IN terms of Regulation 5 of the Motor-drivers' Regulations, 1931, I, James Alexander Young, Acting Minister of Transport, do hereby approve until further notice of the persons named in Column 2 of the Schedule hereunder being Testing Officers under the said regulations for the local authorities described in Column 1 of the said Schedule.

SCHEDULE.

Column 1.	Column 2.
Raetihi Borough Council ..	Edward Charles Davis, Borough Foreman, Raetihi.
Taihape Borough Council ..	Frank Sainty, Borough Officer, Taihape.
Palmerston Borough Council ..	Robert George Paul, Borough Foreman, Palmerston.

Dated at Wellington, this 3rd day of July, 1935.

J. A. YOUNG, Acting Minister of Transport.  
(TT. 9/4/3.)

*Constituting a Recognized Aviation Authority.*

Office of the Minister of Defence,  
Wellington, 3rd July, 1935.

IN pursuance and exercise of the power and authority conferred on me by section 3 of the Local Authorities Empowering (Aviation Encouragement) Act, 1929, I, John George Cobbe, Minister of Defence for the Dominion of New Zealand, do hereby recognize for the purpose of that Act the undermentioned aviation authority:—

Percy Raymond Forbes Thode, of Waipapakauri.

JOHN G. COBBE, Minister of Defence.

*Prohibition of Issue of Money-orders and Transmission of Postal Correspondence.*

THE Postmaster-General of the Dominion of New Zealand having reasonable ground for supposing that the person whose name and address is shown in the Schedule hereunder is engaged in promoting or carrying out a lottery or scheme of chance, it is hereby ordered, under section 32 of the Post and Telegraph Act, 1923, that no money-order in favour of the said person shall be issued, and that no postal packet addressed to the said person (either by her own or any fictitious or assumed name), or addressed to the address in the Schedule hereunder without a name, shall be either registered or forwarded by the Post Office of New Zealand.

SCHEDULE.

Miss Flo Bentley, 8 Rickard Street, Guildford, New South Wales.

Dated at Wellington, this 2nd day of July, 1935.

ADAM HAMILTON, Postmaster-General.

*Prohibition of Issue of Money-orders and Transmission of Postal Correspondence.*

THE Postmaster-General of the Dominion of New Zealand having reasonable ground for supposing that the persons and organizations whose names and addresses are shown in the Schedule hereunder are engaged in promoting or carrying out a lottery or scheme of chance, it is hereby ordered, under section 32 of the Post and Telegraph Act, 1923, that no money-order in favour of any of the said persons or organizations shall be issued, and that no postal packet addressed to any of the said persons or organizations (either by their own or any fictitious or assumed names), or addressed to any of the addresses in the Schedule hereunder without a name, shall be either registered or forwarded by the Post Office of New Zealand.

SCHEDULE.

Mr. W. Arensberg, 5 Rue Eugène Carrière, Strasbourg, France.

La West Continentale S.A., or Luxembourg Red Cross Sweepstakes, Luxembourg (Grand-Duchy).

Mr. Arthur Schwartz, 30 Rue Malesherbes, Lyon, France.

Dated at Wellington, this 3rd day of July, 1935.

ADAM HAMILTON, Postmaster-General.

*Administration of Noxious Weeds Act, 1928, in Franklin County.—(Notice No. Ag. 3304.)*

Department of Agriculture,  
Wellington, 9th July, 1935.

THE following resolution passed by the Franklin County Council on the 25th day of March, 1935, is published in accordance with the provisions of section 7 (2) of the Noxious Weeds Amendment Act, 1934.

RESOLUTION.

“THAT on the recommendation of the Finance Committee this Council takes all necessary steps under the Noxious Weeds Amendment Act, 1934-35, to assume the administration of the Noxious Weeds Act, 1928, and its amendments within Franklin County as from the 1st day of July, 1935, and that a copy of this resolution be forwarded to the Honourable the Minister of Agriculture for publication in the *New Zealand Gazette*.”

CHAS. E. MACMILLAN, Minister of Agriculture.

*Electrical Wiremen's Registration Act, 1925.—Names removed from Registers.*

REGISTER OF INSPECTORS OF ELECTRICAL WIRING.

Smithson, Gordon William .. Late Inspector for the Raetihi Borough Council. Address: Care of Electrical and Radio Service, Seddon Street, Raetihi.

Walker, Ellis Vernon .. Late Inspector for the Thames Valley Electric-power Board. (Deceased.)

Dated at Wellington, this 5th day of July, 1935.

JOHN BITCHENER, Minister of Public Works.  
(P.W. 26/200/B.)

*Firelight Committee Elections under the Firelight Committee Regulations, 1928.*

DECLARATION OF ELECTION OF MEMBERS OF THE FIRELIGHT COMMITTEE OF THE GISBORNE COMMERCIAL FRUITGROWING DISTRICT.

I, JOHN GRAY, Returning Officer for the purposes of the Firelight Committee Regulations, 1928, do hereby declare that the following candidates have been duly nominated for the election of members of the Firelight Committee of the Gisborne Commercial Fruitgrowing District, nominations for which closed at Wellington at noon on the 5th day of July, 1935:—

Bell, Percival George.  
Hall, William Matthew.  
Hardy, James Cecil.  
Kirk, Frederick Thomas.  
Pearson, Charles.

As the number of candidates nominated does not exceed the number of members to be elected (5), I hereby declare the said Percival George Bell, William Matthew Hall, James Cecil Hardy, Frederick Thomas Kirk, and Charles Pearson to be duly elected.

Dated at Wellington, this 6th day of July, 1935.

JOHN GRAY, Returning Officer.

*Officiating Ministers for 1935.—Notice No. 28.*

Registrar-General's Office,  
Wellington, 9th July, 1935.

PURSUANT to the provisions of the Marriage Act, 1908, the following name of an Officiating Minister within the meaning of the said Act is published for general information:—

The Presbyterian Church of New Zealand.  
The Reverend Leslie William Rothwell.

G. G. HODGKINS, Deputy Registrar-General.

*New Zealand Government Railways.—Notice to Sawmillers.*

THE Government Railways Board is offering for sale by public tender the timber (principally rimu) in its forest near Pokaka in the Ohakune railway district. The forest has been divided into four lots. Two lots are for immediate sale, and the purchasers of these will be given the first refusal of the remaining two when the present lots are cut out. The particulars and conditions of sale may be inspected at the offices of the Railway District Engineers at Auckland, Wanganui, Ohakune, Wellington, Christchurch, Dunedin, and Invercargill, and of the Railway Forestry Officer at Wellington.

Tenders will close on 10th September, 1935.

G. H. MACKLEY,  
General Manager.

*Licenses issued to Manufacturing Retailers under the Sales Tax Act, 1932-33.*

Customs Department,  
Wellington, 8th July, 1935.

IT is hereby notified for public information that licenses to act as manufacturing retailers under the Sales Tax Act, 1932-33, have been issued to the under-mentioned persons, firms, and companies carrying on business at the places stated opposite the names of each respectively.

E. D. GOOD, Comptroller of Customs.

Name of Person, Firm, or Company.	Place or Places at which Business is carried on.
Auckland Motor Bodies, Ltd. (from 1st April, 1934)	Auckland.
Baird, Hugh William Charles .. .. .	Hastings, Waipukurau.
Ballinger, N. V., and Co., Ltd. (from 1st March, 1935)	Palmerston North.
"Barbara" (from 1st April, 1934) .. .	Auckland.
Beamish, Bridget (from 1st January, 1935)	Rotorua.
Benton, Leslie George (from 1st April, 1935)	Featherston.
Boxes Ltd. (from 13th November, 1934)	Auckland.
British Neon Corporation, Ltd. (from 1st March, 1935)	Auckland.
Brooker, Stephen Charles (from 1st February, 1935)	Rotorua.
Brown, Isaac, and Co. (from 17th July, 1934)	Thames, Paeroa, Waihi.
Bythell and Co., Ltd. .. .. .	Blenheim.
Callaghan and Stewart, Messrs. (from 1st April, 1935)	Wellington.
Carter, Lucy May (Miss) (from 1st April, 1935)	Masterton.
Cockfield, Edward Henry Nelson .. .	Auckland.
Coker Bros., Messrs. .. .. .	Oamaru.
Co-op. Chair Co., Ltd. (from 1st February, 1935)	Wellington.
Cuddon, William George Gorton .. .	Blenheim.
Denton, H., and Co. (from 1st April, 1935)	Auckland.
Dimick, W. A. .. .. .	Oamaru.
Dodge Bros. (from 1st April, 1935) .. .	Christchurch.
Eden Motor Body Co., Ltd. (from 1st April, 1934)	Auckland.
Ellison, G. .. .. .	Napier.
Empire Motor Body Works, Ltd., The (from 1st March, 1935)	Auckland.
Ewen, James Findlay (from 1st April, 1935)	Wellington.
Gasparini Bros. (from 1st April, 1935) .. .	Wellington.
Grinter, Albert George (from 1st April, 1935)	Papatoetoe.
Hamilton Motor Bodies .. .. .	Hamilton.
Harrow, James Alfred (from 1st January, 1935)	Christchurch.
Hayes, Bertram William (from 1st April, 1935)	Christchurch.
Hay's Limited (from 20th January, 1935)	Christchurch.
Hutcheon, Hugh Hepburn (from 1st April, 1935)	Pahiatua.
Hutchinson, A. and G. (from 1st November, 1934)	Auckland.
Jamieson Ltd., J. and W. (from 1st April, 1935)	Christchurch.
Kilby, Walter (from 1st April, 1935) .. .	Wellington.
King and Teppett, Ltd. (from 1st July, 1934)	Palmerston North.
Lee, Judy (from 1st April, 1935) .. .	Dunedin.
Lloyd, Cyril Rankin (from 1st April, 1934)	Rotorua.
McKenzie, Alexander Frederick .. .	Taihape.
McLean, Mary (from 1st April, 1935) .. .	Wellington.
Magee, George, and Co. (from 1st February, 1935)	Auckland.
Malcolm and Lund .. .. .	Timaru.
"Marlene" (from 1st April, 1934) .. .	Auckland.
Marriage's (Wholesale), Ltd. (from 1st April, 1935)	Auckland.
Max Studio (from 1st March, 1935) .. .	Wellington.
Millars' Timber and Trading Co. (Overseas), Ltd. (from 1st April, 1935)	Auckland, Dunedin, Wellington.
Miller, David Alexander (from 1st April, 1935)	Hamilton.
Model Aeroplane Supply Co., The .. .	Auckland.
Morgan Concrete Co. .. .. .	Waitara.
Municipal Electricity Department (from 1st April, 1935)	Christchurch.
Munro, Robert John .. .. .	Christchurch.
Nason, Harold Charles .. .. .	Auckland.
Pahiatua Herald Co., Ltd., The (from 1st April, 1935)	Pahiatua.
Palmer, Charles Samuel .. .. .	Hastings.
Pell, Misses .. .. .	Wellington.
Peterson, Frederick (from 1st April, 1935)	Dunedin.

Name of Person, Firm, or Company.	Place or Places at which Business is carried on.
Prisk Tailoring Company (from 1st January, 1935)	Christchurch.
Purser Bros., Ltd.	New Plymouth.
Reid and Renner (from 9th February, 1935)	Wellington.
"Reliance" Co. (from 1st April, 1935)	Wellington.
Ridezee Motor Bodies (from 1st April, 1935)	Auckland.
Roachs' (1931), Ltd.	Hastings.
Rough and Bristow, Ltd. (from 1st February, 1935)	Wellington.
Russell Cycles and Motors	Gisborne.
Sel-Phit School of Dressmaking (from 1st April, 1934)	Auckland.
Silk Screen Reproductions (from 1st February, 1935)	Wellington.
Snell, H. (from 1st April, 1934)	Auckland.
South Island Motors, Limited, The (from 1st May, 1935)	Christchurch.
Spreydon Cycle Depot (from 1st May, 1935)	Christchurch.
Starsmeare, George	Timaru.
Sterling Electro-plating Co., Ltd., The (from 1st April, 1935)	Wellington.
Talamona, Massimo (from 1st April, 1935)	Christchurch.
Thompson and MacDonald (from 1st January, 1935)	Christchurch.
Thomson, Thomas (trustees in estate of) (from 1st April, 1935)	Timaru.
Tilyard, John Clement (from 1st April, 1935)	Wellington.
Tingey and Hubbard, Ltd. (from 1st April, 1935)	Feilding.
Trayes Bros. (from 1st April, 1934)	Auckland.
Tuakau Joinery and Cabinet Works (from 8th April, 1935)	Tuakau.
Wellington Mechanical Engineering Co. (from 1st April, 1935)	Wellington.
Wilson, Frederick John (from 1st April, 1934)	Auckland.
Winger, Ray, Timber Co., Ltd.	Onehunga.

*The licenses as manufacturing retailers issued to the undermentioned persons, firms, and companies have been cancelled:—*

Armstrong and Miller	Auckland.
Barratt, William	Blenheim.
Ballinger's	Palmerston North.
Bieleski, Raymond	Te Puke.
Bright and Wall	Wellington.
Casey, William, Ltd. (Leonard Knight receiver for debenture-holder)	Auckland.
Cher and Co.	Wellington.
Crown Furniture Works	Wellington.
Couchman Cycle Co., Ltd.	Wellington.
Derbyshire, F. L.	Wanganui.
Ebbs Lingerie	Wellington.
Eden Motor Body Co., Ltd.	Auckland.
Edendale Furniture Factory	Auckland.
Edwards, H. J.	Hawera.
Empire Motor Body Works	Auckland.
Fine, Abraham	Wellington.
Flyger, Edgar Leopold	Auckland.
Fraser, Alexander	Whangarei.
Hobb, F., and Co.	Christchurch.
Jacqueline Frock Shop	Palmerston North.
Kathella	Gisborne.
Kendrick, Alfred	Marton.
McBean, Alexander	Palmerston North.
McErlane Bros., Ltd.	Timaru.
Mackie and Sons, Ltd.	Te Aroha.
Millars' West Australian Hardwoods Co., Ltd.	Auckland, Dunedin, Wellington.
Moodie, J. F., and Co.	Dunedin.
"Pauline"	Wellington.
Pell and Dormer	Wellington.
Reid, M. and J.	Auckland.
Sharpé Bros.	Ashburton.
Smith, J. A., and Co., Ltd.	Greymouth.
Swanson, Chas.	New Plymouth.
Swift New Zealand Co., Ltd.	Wairoa, Hawke's Bay, Christchurch.
Taylor, Fred, and Co.	Christchurch.
Thompson, William	Wellington.
Thomson, T. and J.	Timaru.
Trevor Bros., Ltd.	Palmerston North.
Trayes Bros.	Auckland.
Tuakau Joinery and Cabinet Works	Tuakau.
Valerie	Wellington.
Vickers, Constance Mary	Auckland.
Wass, Thomas	Palmerston North.

*Licenses issued to Wholesalers under the Sales Tax Act, 1932-33.*

Customs Department,  
Wellington, 8th July, 1935.

IT is hereby notified for public information that licenses to act as wholesalers under the Sales Tax Act, 1932-33, have been issued to the undermentioned persons, firms, and companies carrying on business at the places stated opposite the names of each respectively.

E. D. GOOD, Comptroller of Customs.

Name of Person, Firm, or Company.	Place or Places at which Business is carried on.
A.	
Anita Millinery Co. (from 1st July, 1935)	Wellington.
Apex Furniture Frame Co., Ltd. (from 1st June, 1935)	Wellington.
B.	
Banno Brothers (from 1st June, 1935) ..	Auckland.
Beck, James Walter (from 1st June, 1935)	Wellington.
Bransden, E. I. .. .. .	Whitecliffs, Inangahua Junction.
Brown, James Clifton (from 1st June, 1935)	Wellington.
Brunette, C. .. .. .	Auckland.
C.	
Carr, R. T., Ltd. (from 1st July, 1934) ..	Auckland.
Collie, William (executor of estate of) ..	Blenheim.
Colonial Chemicals, Ltd. (from 1st May, 1935)	Dunedin.
Colour Ray Signs, Ltd. (from 1st May, 1935)	Christchurch.
Curtis, Neville Ian (from 1st June, 1935)	Wellington.
D.	
Dolbel, Philip (trustee of estate of) ..	Napier.
Dynamic Electrical Manufacturing Co., Ltd., The	Napier.
H.	
Hamilton and White (from 1st April, 1935)	Auckland.
Hardie Trading Co., Ltd., James (from 1st July, 1935)	Auckland.
Harris, Rex (from 1st January, 1935) ..	Auckland.
Hemmings Bros. (from 1st June, 1935) ..	Tapapa (Tirau).
Highspeed Sports Goods, Ltd. (from 17th June, 1935)	Auckland.
L.	
Levy, Norman .. .. .	Wellington.
Lindsay and Dixon, Ltd. .. .. .	Tuatapere, Drummond.
Lund, E. H., and Company, Limited (from 20th June, 1935) ..	Wellington.
Lynn, William George (from 1st June, 1935)	Auckland.
N.	
Noton, William (from 1st June, 1935) ..	Auckland.
P.	
Patea Mineral Water Co., Ltd., The ..	Patea.
Paterson, Michel, and Co., Ltd. ..	Hokitika.
Pavilion Frock Co. (from 1st June, 1935)	Wellington.
Premier Supply Co. (from 1st July, 1935)	Christchurch.
Probert and Hunt (from 1st June, 1935)	Wellington.
R.	
Ratanui Sawmilling Co. (from 1st April, 1935)	Te Kuiti.
Russell and Sons (from 21st June, 1935)	Auckland.
S.	
Staunton, Thos., and Co. (from 1st June, 1935)	Auckland.
Stirling, Henry, Ltd. .. .. .	Auckland.
Sutherland and Co., Ltd. .. .. .	Te Tua.
Swanson, C., Limited (from 24th June, 1935)	New Plymouth.
Swift New Zealand Co., Ltd (from 1st July, 1935)	Wairoa, Christchurch.
W.	
Wellington Pleating Co. (from 13th May, 1935)	Wellington.
Wytelyte Chalk Manufacturing Co., Ltd., The (from 1st June, 1935)	Christchurch.



Public Trustee.—Deceased Persons' Estates under Administration.

THE PUBLIC TRUST OFFICE OF NEW ZEALAND.—INCORPORATED UNDER THE PROVISIONS OF THE PUBLIC TRUST OFFICE ACT, 1908.

PARTICULARS of the Estates of Deceased Persons placed under the charge of the PUBLIC TRUSTEE during the month of June, 1935 :—

No.	Name of Deceased.	Residence.	Occupation.	Date of Death.	Remarks.
1	Allwood, Johanna .. ..	Auckland ..	Married woman ..	21/5/33	Intestate.
2	Anderson, Donald Munro ..	Wellington ..	Milkroundsman ..	4/6/35	"
3	Andrews, John .. ..	Hazelburn ..	Farmer .. ..	25/5/35	Testate.
4	Apps, Emma Emily .. ..	Waikouaiti ..	Widow .. ..	2/6/35	Intestate.
5	Baber, Eleanor Primrose ..	Auckland ..	Spinster .. ..	11/6/35	Testate.
6	Bagrie, John .. ..	Levin .. ..	Retired police constable	17/6/35	"
7	Barnes, Robert John .. ..	Christchurch ..	Retired Salvation Army officer	17/6/35	"
8	Becker, Jennie .. ..	Wellington ..	Married woman ..	4/5/29	Intestate.
9	Bennett, George McIntosh ..	New Plymouth ..	Builder .. ..	9/6/35	Testate.
10	Boaler, Lizzie Hensley .. ..	Haumoana ..	Spinster .. ..	6/6/35	"
11	Bolton, Annie Ellen .. ..	Sydney ..	Married woman ..	15/8/33	"
12	Bowater, Joseph Frederick Bertie	Palmertson North	Cabinetmaker ..	14/6/35	"
13	Boyle, Albert Edward .. ..	Norsewood ..	Grocer .. ..	8/6/35	Intestate.
14	Brightmore, Jessie .. ..	Wellington ..	Married woman ..	9/6/35	Testate.
15	Bryant, George Frederick ..	Christchurch ..	Carriage-builder ..	1/6/35	"
16	Cable, Frederick William ..	Ohakune ..	Retired farmer ..	18/4/35	Intestate.
17	Campbell, John .. ..	Gisborne ..	Retired baker ..	9/6/35	Testate.
18	Campbell, Martha .. ..	Tinwald ..	Widow .. ..	17/6/35	"
19	Cantwell, Joseph .. ..	Makotuku, Dannevirke	Farmer .. ..	30/5/35	"
20	Cattermole, John William ..	Christchurch ..	Labourer .. ..	21/6/35	"
21	Climie, Maria Isabel .. ..	Christchurch, formerly Wellington	Widow .. ..	17/6/35	"
22	Clow, Catherine Rivers .. ..	Lyttelton ..	Married woman ..	19/6/35	"
23	Cole, Grace Catherine .. ..	Kaitieke ..	" .. ..	14/5/35	"
24	Corbett, Timothy Michael ..	Gisborne ..	Soapmaker .. ..	19/6/35	"
25	Conway, Michael .. ..	Coonoor ..	Farmer .. ..	26/5/35	"
26	Cook, Clara Mabel .. ..	Christchurch ..	Married woman ..	31/5/35	"
27	Cooper, Ashley Griffith .. ..	" .. ..	Accountant .. ..	12/6/35	"
28	Copland, John George .. ..	Balclutha ..	Slaughterman ..	5/6/35	Intestate.
29	Cotter, Patrick .. ..	Urenui .. ..	Labourer .. ..	8/4/35	"
30	Dagleish, Alice Mary .. ..	Wellington ..	Widow .. ..	10/6/35	Testate.
31	Davis, Mary Ann .. ..	Christchurch ..	" .. ..	25/5/35	"
32	Davis, Sarah .. ..	Whangarei ..	" .. ..	10/6/35	"
33	Davis, William .. ..	Christchurch ..	Gardener .. ..	8/6/35	Intestate.
34	Dawson, Ada .. ..	" .. ..	Widow .. ..	16/6/35	Testate.
35	De Meio, Domenico .. ..	Roa .. ..	Miner .. ..	15/5/35	Intestate.
36	Dempsey, Christina .. ..	Christchurch ..	Married woman ..	9/5/35	"
37	Dempster, Margaret Reid ..	Dunedin ..	Spinster .. ..	30/5/35	Testate.
38	Dickson, James .. ..	Auckland ..	Retired labourer ..	28/5/35	Intestate.
39	Drake, Thomas Fordham ..	Christchurch ..	Retired farmer ..	1/6/35	Testate.
40	Dunn, Joseph .. ..	Levin .. ..	" .. ..	23/5/35	"
41	Dunstall, Samuel .. ..	Napier .. ..	Contractor .. ..	30/5/35	"
42	Edgeworth, Annie .. ..	Christchurch ..	Widow .. ..	15/6/35	"
43	Ferguson, William .. ..	Wellington ..	Civil engineer ..	20/6/35	"
44	Finlinson, Mellia .. ..	Dunedin ..	Spinster .. ..	21/5/35	Intestate.
45	Finucane, Martin .. ..	Manutuke ..	Labourer .. ..	16/5/35	Testate.
46	Fitzgerald, James .. ..	New South Wales	Sugar-boiler ..	11/7/19	"
47	Ford, George .. ..	Dunedin ..	Retired inspector of stock	29/5/35	"
48	Fowler, Joseph .. ..	Christchurch ..	Retired photographer	15/6/35	"
49	Fox, William .. ..	Le Bon's Bay ..	Shepherd .. ..	22/4/35	Intestate.
50	Fraser, Elizabeth .. ..	Auckland ..	Widow .. ..	16/6/35	Testate.
51	Hand, John .. ..	Alexandra ..	Labourer .. ..	25/5/35	"
52	Hanger, Robert .. ..	Ohakune ..	Bank officer ..	22/4/35	"
53	Hanham, Sarah Jane .. ..	Auckland ..	Widow .. ..	20/5/35	Intestate.
54	Hankins, Frances Alice .. ..	Napier ..	Spinster .. ..	13/6/35	Testate.
55	Hansen, Alfred Bille .. ..	Norsewood ..	Farmer .. ..	6/6/35	"
56	Heatley, David Park .. ..	Dunedin ..	Clerk .. ..	5/6/35	"
57	Heeney, Arthur .. ..	Lower Hutt ..	Retired Civil servant	23/5/35	"
58	Hepworth, William .. ..	Wellington ..	Gardener .. ..	23/5/35	"
59	Hibbard, Gladys Amelia ..	Christchurch ..	Married woman ..	19/6/35	"
60	Hill, Emma .. ..	" .. ..	Widow .. ..	8/6/35	"
61	Holmes, Carl Frederick .. ..	Wanganui ..	Blacksmith .. ..	29/4/35	"
62	Horgan, Edward .. ..	Blenheim ..	Fireman .. ..	13/5/35	"
63	Hunt, Clara .. ..	Dannevirke ..	Widow .. ..	13/6/35	"
64	Hunt, John David Campbell	Nelson ..	Relief worker ..	8/4/35	Intestate.
65	Johnson, Joseph .. ..	Auckland ..	Carter .. ..	3/6/35	"
66	Johnston, Agnes .. ..	Waiheke Island	Married woman ..	29/12/33	"
67	Johnston, Charles Ronaldson Stopgrove	Ashburton ..	Labourer .. ..	29/5/35	Testate.
68	Kaler, William Frederick ..	Dunedin ..	Retired mental hospital attendant	5/6/35	"

## DECEASED PERSONS' ESTATES UNDER ADMINISTRATION—continued.

No.	Name of Deceased.	Residence.	Occupation.	Date of Death.	Remarks.
69	Kennedy, William	Annat	Retired fellmonger and woolclasser	1/6/35	Testate.
70	Kibblewhite, Charles	Bloemfontein O.F.S. (South Africa)	Hawker	13/11/31	"
71	King, Mary Jane	Christchurch	Widow	17/6/35	"
72	Lace, Richard John	Rangiora	Engineer	10/6/35	"
73	Lambert, Mary Louisa	Wanganui	Widow	17/6/35	"
74	Lambert, Sophia Amelia	Seddon	Married woman	31/10/11	"
75	Lammis, Mark William	Nelson	Retired blacksmith	18/6/35	"
76	Lavender, Henry Fretwell	Christchurch	Farmer	8/6/35	Intestate.
77	Le Breton, Isabelle Ada	"	Married woman	1/6/35	Testate.
78	Leggoe, Margaret	Ikamatua	"	24/5/35	Intestate.
79	Le Huquet, Thomas	Devonport, Auckland	Builder	22/5/35	Testate.
80	Leighton, Mary	Christchurch	Married woman	24/5/35	"
81	Lai Chee Low, otherwise known as Li Chee Chong Lee	Wellington, formerly Blenheim	Widow	23/3/35	Intestate.
82	McAlinden, William Montgomery Copeland	Auckland	Labourer	31/5/35	Testate.
83	McCarthy, James Joseph	Wellington	Waterside worker	13/5/35	"
84	McCarthy, Jeremiah	Opotiki	Settler	29/5/35	Intestate.
85	McCombs, Elizabeth Reid	Christchurch	Widow	7/6/35	Testate.
86	McDonald, Alexander	Blackball	Miner	4/2/32	"
87	McDonald, Maria	"	Widow	15/5/35	"
88	McDonald, Ralph Notman	Portobello, late Mataura	Teacher	30/5/35	"
89	McDonald, Robert	Raes Junction	Shepherd	31/10/94	"
90	McEneaney, Owen	Koputaroa, near Levin	Flaxmill employee	26/1/35	Intestate.
91	McEwen, Sarah Henrietta	Tiakitahuna	Widow	25/3/35	"
92	McGaveston, Bertha Miriam	Motueka	Married woman	18/6/35	Testate.
93	McKay, Agnes	Rangiora	Widow	16/6/35	"
94	McKenzie, Jean	Palmerston North	Hotel employee	6/5/35	Intestate.
95	McRae, Duncan	Napier	Retired mariner	3/6/35	Testate.
96	Mackintosh, David	Wellington	Carpenter	29/5/35	"
97	Maxwell, Robert Brown Hamilton	Upper Waitohi	Farmer	17/6/35	"
98	Milne, Duncan Robertson	Matamau	Settler	26/5/35	"
99	Milne, James	Middlemarch	Retired farmer	20/6/35	"
100	Morasso, Maria Angela	Cornigliano Ligure, Corso Ferdinando Perrone 42, Italy	Spinster	8/12/33	"
101	Morasso, Teresa Santina	(Not known)	"	19/12/31	Intestate.
102	Newman, Amelia Jane	Wellington	Widow	22/9/32	Testate.
103	Oliver, William Joseph	Auckland	Retired settler	7/6/35	"
104	Pink, Catherine	Dunedin	Married woman	14/6/35	"
105	Pole, William Joseph	Kaikohe	Agency manager	4/5/35	"
106	Ranger, William John Thomas	Gisborne	Agent	14/6/35	"
107	Roberts, William Norman John	New Plymouth	Hairdresser	22/5/35	"
108	Russel, Amie Gray	Auckland	Widow	13/4/35	Intestate.
109	Savory, Henry James	Napier	Cashier	8/6/35	Testate.
110	Shand, Joseph Patterson	Wellington	Pensioner	17/4/35	Intestate.
111	Sharp, George Callan	Auckland	Engineer	26/5/35	Testate.
112	Sheard, Mariott (or Marriott)	Brunnerton	Miner	28/5/85	"
113	Shepherd, Edwin Charles	Auckland	Retired farmer	17/6/35	"
114	Still, Henry Anthony, or Still, Henry Anthony Kenyon	"	Gas company employee	23/5/35	"
115	Taylor, Katherine Ogilvie	"	Spinster	12/6/35	Intestate.
116	Terris, Florence Louise	Christchurch	Married woman	28/5/35	Testate.
117	Thomas, William John Tremayne	Birkenhead, Auckland	Missioner	19/6/35	"
118	Timms, John Henry	Christchurch	Retired railway employee	6/6/35	"
119	Trerise, Emma Jane	"	Widow	13/6/35	"
120	Trewavas, Isabella	Motueka	"	28/5/35	"
121	Ure, Mary Ann	Bondi, Sydney, N.S.W.	Married woman	31/12/34	"
122	Veale, Sarah Jane	Auckland	"	28/5/35	"
123	Wade, Charles Herbert	Auckland, formerly Tokoroa	Forester	21/6/35	"
124	Walker, Hannah	Hastings	Widow	31/5/35	"
125	Walsh, James	Onehunga	Retired farmer	4/6/35	"
126	Watkins, George	Tauranga	"	24/6/32	Intestate.
127	Webb, Rose	Lower Hutt	Widow	17/5/35	Testate.
128	Wilhelm, Gustav Julius	Marton	Farmer	11/6/35	"
129	Wright, Walter Harold	Hokitika	Blacksmith	26/3/35	"

**CROWN LANDS NOTICES.**

*Lands in the North Auckland, Auckland, Hawke's Bay, Taranaki, Wellington, Canterbury, and Southland Land Districts forfeited.*

Department of Lands and Survey, Wellington, 9th July, 1935.

NOTICE is hereby given that the leases and licenses of the undermentioned lands having been declared forfeited by resolutions of the Land Boards of the respective land districts, the said lands have thereby reverted to the Crown under the provisions of the Land Act, 1924, the Land for Settlements Act, 1925, and the Discharged Soldiers Settlement Act, 1915.

**SCHEDULE.**

Tenure.	Lease or License No.	Section.	Block.	Survey District.	Lessee or Licensee.
<b>NORTH AUCKLAND LAND DISTRICT.</b>					
R.L.	1514	11	XIV	Waitemata .. ..	A. E. Curry.
O.R.P.	5326	24	XIV	Waoku .. ..	T. Wylie.
D.P.	700	Lots 6 and 7 of Allotment 10, Section 2	..	Whau Town North .. ..	H. Green (deceased).
O.R.P.	5635	5	I	Rangauna .. ..	Wati Paetau (deceased).
R.L.	1576	204	..	Paremoremo Parish .. ..	G. J. S. Small.
Real.	71	Lot 7 on D.P. 8018, part Allotment 124	..	" .. ..	G. W. Stewart.
Real.	103	Lot 1, D.P. 13571, part Allotment 123	..	" .. ..	"
R.L.	625	9	III	Hukerenui .. ..	H. A. Johnson.
I.D.P.	170	117	..	Town of Orakei .. ..	R. H. Donaldson.
R.L.	1884	4	VI	Purua .. ..	F. W. Raynel.
I.D.P.	101	33	..	Town of Orakei .. ..	D. R. Revell.
R.L.	1648	23	VIII	Pakiri .. ..	J. L. S. Shaw.
<b>AUCKLAND LAND DISTRICT.</b>					
O.R.P.	4141	5	X	Whareorino .. ..	J. J. Bowen.
R.L.	986	5	VII	" .. ..	"
R.L.	978	10s	..	Ohauti Settlement .. ..	H. F. L. Riches.
R.L.	1601	2	XV	Kawhia North .. ..	Pu Tamainu.
D.S.	726	5s	..	Pukemapou Settlement .. ..	C. G. E. Andrews.
D.P.	993	5	II	Moturiki Township .. ..	J. A. M. Witherow.
D.P.	998	8, 9, 10, and 27	IV	" .. ..	"
D.P.	1018	21	V	" .. ..	"
D.P.	1231	8, 15, and 16	..	Tairua Village .. ..	Mrs. I. Petley.
D.P.	1272	Allotment North 6	X	Te Kuiti N.T. .. ..	W. A. Cole.
D.P.	2319	Allotment 126	..	Karioi Parish .. ..	Hone Ranga.
<b>HAWKE'S BAY LAND DISTRICT.</b>					
L.I.P.	297	16	XIII	Wakarara .. ..	S. J. Fletcher.
<b>TARANAKI LAND DISTRICT.</b>					
R.L.	344	8	I	Rangi .. ..	A. H. Murray.
O.R.P.	348	16	XV	Pouatu } .. ..	W. G. Wilson.
O.R.P.	544	2	III	Mahoe }	
O.R.P.	460	1	VI	Mahoe .. ..	D. H. Proffit, sen.
O.R.P.	947	20	XI	Totoro .. ..	J. P. R. Cullen.
<b>WELLINGTON LAND DISTRICT.</b>					
H.V.D.P.	778	17	XXVII	Hutt Valley Settlement .. ..	E. A. Dudley.
H.V.D.P.	841	9, 10, 11, and 12	XXIX	" .. ..	W. E. Jones and Co., Ltd.
H.V.D.P.	298	25	XXIV	" .. ..	G. Cree.
R.L.	230	2	XVI	Momahaki .. ..	B. Allen.
D.P.	909	46	..	Loughnan Settlement.. ..	A. R. Martin.
O.R.P.	1060	3	XVI	Retaruke .. ..	S. A. Martin.
<b>CANTERBURY LAND DISTRICT.</b>					
R.L.	323	Section 7, Sherwood Downs Settlement	VII	Opuha .. ..	M. More.
<b>SOUTHLAND LAND DISTRICT.</b>					
R.L.	319	45	II	Oteramika Hundred .. ..	S. Blacklow.



*Land in Auckland Land District for Selection on  
Optional Tenure.*

District Lands and Survey Office,  
Auckland, 10th July, 1935.

NOTICE is hereby given that the undermentioned section is open for selection on optional tenure under the Land Act, 1924; and applications will be received at the Auckland District Lands and Survey Office, Auckland, up to 11 o'clock a.m. on Monday, 29th July, 1935.

Applicants should appear personally for examination at the Auckland District Lands and Survey Office, Auckland, on Thursday, 1st August, 1935, at 10.30 o'clock a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

SCHEDULE.

AUCKLAND LAND DISTRICT.—SECOND-CLASS LAND.

*Otorohanga County.—Wharepapa Survey District.*

SECTION 13, Block XV: Area, 367 acres 1 rood. Capital value, £185. Deposit on deferred payments, £10: Half-yearly instalment on deferred payments, £5 13s. 9d. Renewable lease: Half-yearly rent, £3 14s.

Weighted with £85 for improvements, consisting of dwelling, clearing and grassing, 30 chains of road boundary-fencing, half-share in 40 chains boundary-fencing, 20 chains of draining. Payable either in cash, or the total amount to remain on mortgage over a period of ten years, payable in the case of a New Zealand discharged soldier by instalments of principal and interest (5 per cent.) combined totalling £5 9s. 1d. per half year, in the case of a civilian by instalments of principal and interest (5½ per cent.) combined totalling £5 11s. 8d. per half year.

A grazing property, situated on the Waipari Road, two miles and a half from Ngaroma Post-office and School and thirty-five miles from Te Awamutu Railway-station by metalled road.

Approximately 10 acres in worn-out pasture, 110 acres bush land felled and grassed but now reverted, 46 acres open country in fern, balance in standing bush. Ragwort requires attention.

Any further particulars required may be obtained from the undersigned.

K. M. GRAHAM,  
Commissioner of Crown Lands.

(L. and S. 26/11761.)

*Land in Auckland Land District for Selection on Optional  
Tenure.*

District Lands and Survey Office,  
Auckland, 10th July, 1935.

NOTICE is hereby given that the undermentioned section is open for selection on optional tenure under the Land Act, 1924, and applications will be received at the District Lands and Survey Office, Auckland, up to 11 o'clock a.m. on Monday, 29th July, 1935.

Applicants should appear personally for examination at the District Lands and Survey Office, Auckland, on Thursday, 1st August, 1935, at 10.30 o'clock a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

SCHEDULE.

AUCKLAND LAND DISTRICT.—THIRD-CLASS LAND.

*Rotorua County.—Ngongotaha Survey District.*

SECTION 27, Block II: Area, 133 acres 0 roods 6 perches. Capital value, £35. Deposit on deferred payments, £5: Half-yearly instalment on deferred payments, 19s. 6d. Renewable lease: Half-yearly rent, 14s.

Weighted with £95 (payable in cash) for improvements, consisting of clearing and grassing, 5 chains of subdivisional fencing, 36 chains of road boundary-fencing, and half-share in approximately 40 chains of boundary-fencing.

A dairying property, situated on the Whirinaki Road, sixteen miles from the Rotorua Post-office and Railway-station, twenty-one miles from Ngongotaha Dairy Factory and Saleyards. Access by metalled road and formed pumice road. Undulating land of which 75 per cent. is ploughable; watered by a running stream. Approximately 30 acres of worn-out pasture, balance in natural state.

Any further particulars required may be obtained from the undersigned.

K. M. GRAHAM,  
Commissioner of Crown Lands.

(L. and S. 22/4178/1.)

*Settlement Land in Auckland Land District for Selection on  
Renewable Lease.*

District Lands and Survey Office,  
Auckland, 10th July, 1935.

NOTICE is hereby given that the undermentioned section is open for selection on renewable lease under the Land for Settlements Act, 1925; and applications will be received at the District Lands and Survey Office, Auckland, up to 11 o'clock a.m. on Monday, 29th July, 1935.

Applicants should appear personally for examination at the District Lands and Survey Office, Auckland, on Thursday, 1st August, 1935, at 10.30 a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

SCHEDULE.

AUCKLAND LAND DISTRICT.—FIRST-CLASS LAND.—  
SETTLEMENT LAND.

*Tauranga County.—Otanewainuku Survey District.—Ohauti  
Settlement.*

SECTION 10S: Area, 142 acres 1 rood 4 perches. Capital value, £740\*; half-yearly rent, £18 10s.

Improvements not included in capital value and which must be paid for separately comprise dwelling of four rooms, implement-shed, and cow-shed—total, £186. This sum is payable in cash or by a deposit of £11 and the balance of £175 over a period of twenty years by forty half-yearly instalments of £7 0s. 6d. each.

\* Improvements, the value of which is included in capital value of £740, comprise 84 acres cleared and grassed, plantations, and shelter-belts, 70 chains road boundary-fencing, 120 chains subdivisional fencing, and half-share in 100 chains boundary-fencing.

A dairying property, situated on the Ohauti Road, nine miles from Tauranga Railway-station and seven miles and a half from Tauranga Dairy Factory. Access by partly metalled and partly clay road eight miles from Tauranga. Easy to undulating land broken by steep sidings into gullies traversed by streams. Altitude 700 ft. to 800 ft. Approximately 42 acres of good pasture, 42 acres of fair pasture, 15 acres of waste land, balance in natural state of fern and scrub.

Full particulars may be obtained from the undersigned.

K. M. GRAHAM,  
Commissioner of Crown Lands.

(L. and S. 26/5650.)

*Land in Auckland Land District for Sale by Public Auction.*

District Lands and Survey Office,  
Auckland, 10th July, 1935.

NOTICE is hereby given that the undermentioned land will be offered for sale by public auction for cash or on deferred payments at the Local Lands Office, Kerepehi, on Wednesday, 21st August, 1935, at 10.30 o'clock a.m., under the provisions of the Land Act, 1924.

SCHEDULE.

*Hauraki Plains County.—Waihou Survey District.*

SECTION 72, Block VI: Area, 6 acres 2 roods 20 perches. Upset price, £65.

Weighted with £12 (payable in cash) for improvements, consisting of 7½ chains of road boundary-fencing and 11½ chains of boundary-fencing.

This section is in close proximity to the Kerepehi Township and was formerly known as the Kerepehi Domain (old). The area, which is suitable for grazing purposes, is at present under rushes interspersed with patches of rough feed. In a partly-drained state and can be fully drained at little additional expense.

Terms of sale and any further particulars required may be obtained on application to the undersigned.

K. M. GRAHAM,  
Commissioner of Crown Lands.

(L. and S. 6/1/145.)

*Land in Hawke's Bay Land District for Selection on Optional Tenure.*

District Lands and Survey Office,  
Napier, 10th July, 1935.

NOTICE is hereby given that the undermentioned section is open for selection on optional tenure under the Land Act, 1924, and applications will be received at the District Lands and Survey Office, Napier, up to 4 o'clock p.m. on Tuesday, 6th August, 1935.

Applicants should appear personally for examination at the District Lands and Survey Office, Napier, on Thursday, 8th August, 1935, at 10.30 o'clock a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

SCHEDULE.

HAWKE'S BAY LAND DISTRICT.—THIRD-CLASS LAND.

*Hawke's Bay County.—Tarawera Survey District.*

SECTION 3, Block VII: Area, 1,724 acres. Capital value, £1,300. Deposit on deferred payments, £70: Half-yearly instalment on deferred payments, £39 19s. 6d. Renewable lease: Half-yearly rent, £26.

A grazing proposition, not subdivided or boundary fenced, situated on the main Napier-Taupo Road about fifty-three miles from Napier, and sixty-six miles from the Stortford Lodge (Hastings) Saleyards. The section is hilly and broken by large gorges, covered with very poor native grass, moss, bidi bidi, fern, and manuka. The soil is of a light pumice nature; watered by streams. Altitude 1,500 ft. to 2,000 ft.

Any further particulars required may be obtained from the undersigned.

F. R. BURNLEY,  
Commissioner of Crown Lands.

(L. and S. 8/2/46.)

*Lands in Taranaki Land District for Selection on Renewable Lease.*

District Lands and Survey Office,  
New Plymouth, 10th July, 1935.

NOTICE is hereby given that the undermentioned sections are open for selection on renewable lease under the Land Act, 1924, and the Land for Settlements Act, 1925; and applications will be received at the District Lands and Survey Office, New Plymouth, up to 4 o'clock p.m. on Monday, the 26th August, 1935.

The term of the renewable lease of the Crown land in the First Schedule will be sixty-six years. The term of the renewable lease of the settlement land in the Second Schedule will be thirty-three years.

Applicants should appear personally for examination at the District Lands and Survey Office, New Plymouth, on Wednesday, the 28th August, 1935, at 10.30 o'clock a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

FIRST SCHEDULE.

TARANAKI LAND DISTRICT.

THIRD-CLASS LAND.

*Whangamomona County.—Pouatu Survey District.*

(National Endowment.)

(Exempt from the payment of half the annual rent for ten years.\*)

SECTION 8, Block XVI: Area, 688 acres. Capital value, £175; half-yearly rent, £3 10s.

Loaded with £60 for improvements, comprising fencing, felling and grassing, payable in cash or to be secured by instalment mortgage to the State Advances Superintendent, term thirty years, interest 5½ per cent., half-yearly instalment £2 1s.

\* After payment of rent for the first half year and broken period, if any, an exemption from payment of half the rental charges for a period of ten years will be granted conditional upon improvements to the value of £20 being effected annually during that period.

A dry-stock grazing property situated on the Marangae Road, twelve miles from Kohuratahi Post-office, Railway-station, and Saleyards, and six miles and a half from Kohuratahi School. Access is by seven miles metalled and five miles unmetalled road. Steep to broken country with light loam soil on sandstone; watered by streams. Approximately 300 acres have been felled and grassed, now reverted to second growth with foxglove and a little ragwort, balance area (388 acres) is in natural state.

The successful applicant will require to pay the expenses of preparation and registration of the Superintendent's mortgage amounting to 19s. 6d.

*Whangamomona County.—Pouatu Survey District.*

(National Endowment.)

(Exempt from the payment of half the annual rent for ten years.\*)

Sections 5, 6, 7, and 10, Block XVI: Area, 1,257 acres 2 roods. Capital value, £315; half-yearly rent, £6 6s.

Loaded with £935 for improvements, comprising sheep-dip, fencing, felling and grassing. Payable in cash or to be secured by instalment mortgage, term thirty-six years and a half, half-yearly instalment £28 1s. to a discharged soldier purchaser, or term of thirty-four years and a half, half-yearly instalment £30 7s. 9d. to other purchasers. An exemption from interest payment on the mortgage loading will be granted for two years provided £40 worth of improvements are effected annually in addition to the improvements required to earn the rental exemption.

\* After payment of rent for first half year and broken period, if any, an exemption from payment of half the rental charges for ten years will be granted conditional upon improvements to the value of £30 being effected annually during the exemption period.

A grazing property, situated on the Marangae Road, twelve miles from Kohuratahi Post-office, Railway-station, and Saleyards, and six miles and a half from Kohuratahi School. Access is by metalled road for eight miles and unmetalled four miles. Hilly to steep and broken country, with light loam soil partly on sandstone; well watered by streams. Approximately 900 acres bush land, felled and grassed, balance (357 acres) being in bush and manuka.

SECOND SCHEDULE.

FIRST-CLASS LAND.

*Stratford County.—Omona Survey District.—Tawhiwhi Settlement.*

SECTION 2s and Subdivision 2 of Section 7s: Area, 344 acres 1 rood. Capital value, £800; half-yearly rent, £20.

The improvements comprise dwelling, cow-byre, fencing, felling and grassing, valued at £1,010, of which £455 (representing part value for fencing, felling and grassing) is included in the capital value, and the balance of £555 is to be paid in cash or secured by instalment mortgage, term twenty-five years and a half, half-yearly instalment £19 8s. 6d. to a discharged soldier purchaser, or twenty-four years and a half, half-yearly instalment £20 16s. 3d. to other purchasers.

A grazing property, situated on the Mangaehu Road, two miles from Tututawa Post-office, three miles and a half from Tututawa School, and eight miles from Douglas Railway-station and Saleyards. Access is by metalled road from Stratford. About 40 acres ploughable land, the balance comprising hilly to steep and broken country; watered by streams. The soil is a light loam on sandstone formation. The whole area is in pasture in which ragwort is spreading. Subdivided into eight paddocks.

Application forms and any further information required may be obtained from the undersigned.

F. H. WATERS,  
Commissioner of Crown Lands.

(L. and S. 26/5077 and 20232.)

*Lands in Nelson Land District for Selection.*

District Lands and Survey Office,  
Nelson, 10th July, 1935.

NOTICE is hereby given that the undermentioned sections are open for selection under the Land Act, 1924, and applications will be received at the District Lands and Survey Office, Nelson, up to 4 o'clock p.m. on Tuesday, the 10th September, 1935.

The land described in the First Schedule may at the option of the applicants be purchased for cash or on deferred payments or be selected on renewable lease. The lands described in the Second Schedule may be selected on renewable lease only.

Applicants should appear personally for examination at the District Lands and Survey Office, Nelson, on Thursday, the 12th September, 1935, at 10.30 o'clock a.m., but if any applicant is unable to attend he may be examined by any other Land Board or by any Commissioner of Crown Lands.

The ballot will be held immediately upon conclusion of the examination of applicants.

### FIRST SCHEDULE.

#### NELSON LAND DISTRICT.

##### THIRD-CLASS LAND.

##### *Sounds County.—French Pass Survey District.*

SECTION 10, Block IX, Section 3, Block XII, and part Section 14, Block X: Area, 1,409 acres 3 roods 15 perches. Capital value, £425. Deposit on deferred payments, £25: Half-yearly instalment on deferred payments, £13. Renewable lease: Half-yearly rent, £8 10s.

Weighted with £443 15s. (to be paid in cash) for improvements, comprising wood and iron dwelling of five rooms (in poor state of repair), 150 chains of boundary-fencing (half-share), 100 chains internal fencing, and 560 acres of pasture, reverting to fern.

A grazing property, situated in the Deys Bay Sounds district, about three hours and a half to four hours' run by launch from Havelock. Hilly to steep land of which about 560 acres are in pasture and fern, 300 acres in scrub, rocky faces, and rocky fern, and the balance in natural state. Fair soil resting on sandstone formation; watered by permanent streams. Tauhinu is rather bad in places and although the property has been subdivided it is now all one paddock. This land is light and difficult to keep clean, does not lie to the sun, and is suitable only for dry sheep and a few head of cattle.

### SECOND SCHEDULE.

#### THIRD-CLASS LAND.

##### *Murchison County.—Maruia Survey District.—Westland Mining District.*

(Exempt from payment of rent for ten years.)\*

SECTION 2, Block XVI: Area, 542 acres. Capital value, £160; half-yearly rent, £3 4s.

\* Rental concession is conditional upon the successful applicant effecting improvements each year to the value of twice the amount of the exempted rent.

An unsubdivided grazing property, situated in the Maruia Valley, about nineteen miles from Murchison by metalled road. Cream is collected at the property. The section is well watered and comprises successive terraces along the road frontage, balance hillside. Soil, which rests on sandstone formation, is fair on frontage but poor at the back of the section. Some 200 acres have been cleared, burnt and grassed, but have now reverted to fern; the balance of the area is in birch and totara bush. The section, on which there is a little fencing of no value, is clear of rabbits and noxious weeds.

##### *Inangahua County.—Waitahu Survey District.—Westland Mining District.*

(Exempt from payment of rent for five years.)

Section 1, Block III, and Section 8, Block VII: Area, 286 acres 0 roods 29 perches. Capital value, £135; half-yearly rent, £2 14s.

A grazing property, situated on the Reefton-Maruia Road, eight miles from Reefton Post-office, six miles from Blacks Point School, and nine miles from Reefton Railway-station and the Golden Coast Dairy Factory. Access is by formed road from Reefton.

The area, which is in its natural state, ranges in altitude from 850 ft. to 1,000 ft., and comprises flat and terrace land rising to hillside. The soil is fair on flats, light on terraces, resting on gravel formation; watered by river and creeks. A fire having swept over the sections there is a considerable amount of rough feed available. Blackberry is noticeable.

This land is not first-class, part of it being rather light, but a fair area could be worked and the land is equal to other farming land in the vicinity.

Any further particulars required may be obtained from the undersigned.

A. F. WATERS,  
Commissioner of Crown Lands.

(L. and S. 22/4141, 34/533, X/97/32.)

### STATE FOREST SERVICE NOTICE.

#### *Milling-timber for Sale by Public Tender.*

State Forest Service,  
Palmerston North, 9th July, 1935.

NOTICE is hereby given that written tenders for the purchase of the undermentioned milling-timber will close at this office at 4 p.m. on Monday, the 5th day of August, 1935.

### SCHEDULE.

#### WELLINGTON FOREST-CONSERVATION REGION.—GISBORNE LAND DISTRICT.

ALL the milling-timber on that piece of land, containing 327 acres, more or less, known as Lot 2, being portion of State Forest No. 29, Block II, Ngatapa Survey District, about thirteen miles from Matawai Railway-station.

The total estimated quantity of timber in cubic feet is 586,260, or in board feet 4,084,170, made up as follows:—

Species.	Cubic Feet.	Board Feet.
Rimu .. ..	473,111	3,298,222
Miro .. ..	10,106	67,477
Kahikatea .. ..	78,291	545,910
Matai .. ..	22,252	153,059
Totara .. ..	2,500	17,502
	586,260	4,084,170

Upset price: £5,450.

Time for removal: Four years.

#### *Terms of Payment.*

A marked cheque for one-eleventh of the amount tendered, together with £1 ls. license fee, must accompany the tender, and the balance be paid in ten equal quarterly payments, the first falling due three months after the date of sale.

#### *Terms and Conditions.*

1. All instalment-payments shall be secured by "on demand" promissory notes made and endorsed to the satisfaction of the Commissioner of State Forests, and interest at the rate of 1 per cent. per annum in excess of current bank overdraft rates will be charged on all notes overdue from the date of maturity to the date of payment.

2. The right to cut and remove the timber will be sold in accordance with the provisions of the Forests Act, 1921-22, the regulations in force thereunder, and these conditions.

3. The aforementioned quality, quantity, and kind as to the said timber shall be taken as sufficiently accurate for the purposes of this sale, and no contract for the purchase shall be voidable, nor shall the successful purchaser be entitled to any abatement in price, by reason of the said timber being of less quantity, quality, or kind as stated herein or in any advertisement having reference to the said timber.

4. A return giving the number of logs cut of each species and their contents must be made quarterly by the licensee on the last days of March, June, September, and December, respectively, in each year. A return must also be made on the same dates showing the output of sawn timber of each species. These returns may be ascertained and verified by inspection of the books of the mill, or by such other means as the Conservator may require, and for this purpose the accounts and books shall be open to the inspection of the Conservator, a Forest Ranger, or other duly authorized officer.

5. The attention of all tenderers is drawn to the fact that the local controlling body may require the successful tenderer to pay any claims or charges which may be made by that body for the maintenance of the road over which the timber may be transported, and before a sawmill license is issued a letter indicating that satisfactory arrangements have been made in this connection must be produced to the undersigned.

6. Intending tenderers are expected to visit the locality and to satisfy themselves in every particular on all matters relative to the sale.

7. Each tenderer must state the total price that he is prepared to pay for the timber. The highest or any tender will not necessarily be accepted, and the timber described is submitted for sale subject to the final acceptance of the tender by the Commissioner of State Forests.

8. The right is reserved to the Commissioner of State Forests to withdraw from sale any or all of the said timber either before or after the closing date for receipt of tenders.

9. If no tender is accepted for the timber herein mentioned it will remain open for application at the upset price for three months from the date tenders close.

10. Tenders should be on the special form obtainable from any office of the State Forest Service, and should be enclosed in envelopes addressed "Conservator of Forests, Palmerston North," and endorsed "Tender for Timber."

The conditions, which will be inserted in the license to be issued to the purchaser, and further particulars may be obtained on application to the undersigned or to the Director of Forestry, Wellington.

D. MACPHERSON, Conservator of Forests.

**BANKRUPTCY NOTICES.**

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that PETER JOHN McILVRIDE, of Whangarei, Retired Civil Servant, was this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office on Friday, the 12th day of July, 1935, at 10 o'clock a.m.

Dated at Whangarei, this 3rd day of July, 1935.

A. L. TRESIDDER,  
Official Assignee.

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that HAROLD HARRIS KING, of Motukiore Island, near Whangarei, and RUPERT TRIEVE KING, of Awanui, Farmers, were this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office on Wednesday, the 10th day of July, 1935, at 11 o'clock a.m.

Dated at Whangarei, this 28th day of June, 1935.

A. L. TRESIDDER,  
Official Assignee.

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that WILLIAM HENRY THOMPSON, of Hunua, Papakura, Farmer, was this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office on Thursday, the 11th day of July, 1935, at 10.30 o'clock a.m.

Dated at Hamilton, this 28th day of June, 1935.

V. R. CROWHURST,  
Official Assignee.

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that LESLIE JOSEPH COUPER, of Wairoa, Labourer, was this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office on Tuesday, the 16th day of July, 1935, at 10.30 o'clock a.m.

Dated at Wairoa, this 22nd day of June, 1935.

N. BUTCHER,  
Official Assignee.

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that GEORGE BROUGHTON, also known as Rou Broughton, of Fraser Road, Hawera, Labourer, was this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office, Courthouse, Hawera, on Monday, the 15th day of July, 1935, at 11 o'clock a.m.

Dated at Hawera, this 3rd day of July, 1935.

C. O. PRATT,  
Official Assignee.

*In Bankruptcy.—In the Supreme Court of New Zealand.*

NOTICE is hereby given that So WING (trading as Wing Lee), of Foxton, Market-gardener, was this day adjudged bankrupt; and I hereby summon a meeting of creditors to be holden at my office on Thursday, the 18th day of July, 1935, at 2.30 o'clock p.m.

Dated at Palmerston North, this 6th day of July, 1935.

CHARLES E. DEMPSY,  
Deputy Official Assignee.

*In Bankruptcy.*

In the Estate of AMOS DOWELL, of Hokitika, Hotelkeeper.

NOTICE is hereby given that a first and final dividend of 7s. in the pound is now payable at my office on all proved and accepted claims.

T. P. PAIN,  
Official Assignee.

Hokitika, 6th July, 1935.

J

**LAND TRANSFER ACT NOTICES.**

APPLICATION having been made to me to register a notice of re-entry by the Public Trustee as lessor under Lease No. 15086 of parts of Clendon's Grant, in the Parish of Papakura, parts of the said land being also Lots 2 to 6, 8 to 13, 15 to 27, 29 to 33, and 38 to 44 (all inclusive), on a plan lodged in the Deeds Register Office at Auckland under No. 657, and being all of the land in Certificate of Title, Vol. 517, folio 232 (Auckland Registry), whereof MAURICE HARRIS, of Auckland, Farmer, is the registered lessee, notice is hereby given of my intention to register such notice of re-entry upon the expiration of one month from the 11th day of July, 1935, unless good cause to the contrary be shown.

Dated at the Land Registry Office at Auckland, this 5th day of July, 1935.

W. JOHNSTON, District Land Registrar.

NOTICE is hereby given that the parcel of land hereinafter described will be brought under the provisions of the Land Transfer Act, 1915, unless caveat be lodged forbidding the same on or before 12th August, 1935:—

8075. THE PUBLIC TRUSTEE.—Lot 27 on plan 19787, being part of Allotment 15, Parish of Maungatawhiri, containing 1 acre 1 rood 11-1 perches, fronting Ford Street, Albert Street, and High Street, in the Township of Pokere. Occupied by Johanna Grace Brown.

Diagram may be inspected at this office.

Dated this 5th day of July, 1935, at the Land Registry Office, Auckland.

W. JOHNSTON, District Land Registrar.

EVIDENCE having been furnished of the loss of certificate of title, Vol. 186, folio 168 (Canterbury Registry), for Lot 43, Deposit Plan 875, part of Rural Section 6386, Block VII, Christchurch Survey District, whereof FRANK GAGE, of Marshland, Farmer, is the registered proprietor, and of the loss of outstanding duplicate of Memorandum of Mortgage 180158, whereof HERBERT ASHTON, of Christchurch, Farmer, is the registered mortgagee, and application having been made to me to issue a new certificate of title for the said land and to issue a provisional copy of the said memorandum of mortgage, I hereby give notice that it is my intention to issue such new certificate of title and provisional copy of the said memorandum of mortgage at the expiration of fourteen days from the date of the Gazette containing this notice.

Dated at the Land Registry Office, Christchurch, this 9th day of July, 1935.

A. L. B. ROSS, District Land Registrar.

APPLICATION having been made to me for the issue of a new certificate of title in favour of JOHN LLEWELLYN DAVIES, formerly of Kaitaia, Auckland, Officer in Charge of Wireless Station (now deceased), and JAMES HENRY HAMPTON, of Wellington, Wireless Operator, for Allotments 1, 12, and 13, Block I, Plan 1735, part of Section 17, Block I, Invercargill Hundred, being the land contained in certificate of title, Vol. 117, folio 275, and evidence having been lodged of the loss of the said certificate of title, I hereby give notice that I shall issue a new certificate of title as requested unless caveat be lodged forbidding the same within fourteen days from the date of publication of this notice in the Gazette.

Dated at the Lands Registry Office, Invercargill, the 5th day of July, 1935.

J. A. FRASER, District Land Registrar.

**ADVERTISEMENTS.**

THE COMPANIES ACT, 1933, SECTION 282 (6).

NOTICE is hereby given that the name of the under-mentioned company has been struck off the Register and the company dissolved:—

Lucerne Bondholders Trustees, Limited. 1926/220.

Given under my hand at Auckland, this 8th day of July, 1935.

H. B. WALTON,  
Assistant Registrar of Companies.

## THE COMPANIES ACT, 1933, SECTION 282 (3) AND (4).

NOTICE is hereby given that at the expiration of three months from this date the names of the undermentioned companies will, unless cause is shown to the contrary, be struck off the Register and the companies will be dissolved:—

The Auckland Reformatory and Women's Home. 1886/12.  
Glover Tyre and Rubber Company, Limited. 1924/108.  
Frank Ardern, Limited. 1929/205.  
A. L. Jones, Limited. 1930/172.  
Brights Limited. 1931/31.  
Kauri Industries, Limited. 1933/297.

Given under my hand at Auckland, this 8th day of July, 1935.

H. B. WALTON,  
Assistant Registrar of Companies.

## THE COMPANIES ACT, 1933, SECTION 282 (3).

TAKE notice that the name of the undermentioned company will at the expiration of three months from the date hereof, unless cause be shown to the contrary, be struck off the Register and the company will be dissolved:—

Velva Toilets, Limited. 1930/6.

Given under my hand at Napier, this 10th day of July, 1935.

R. F. BAIRD,  
Assistant Registrar of Companies.

## THE COMPANIES ACT, 1933, SECTION 282 (3).

TAKE notice that at the expiration of three months from the date hereof the names of the undermentioned companies will, unless cause is shown to the contrary, be struck off the Register and the companies will be dissolved:—

Gibbston Coal Company, Limited. 1916/14.  
The Pioneer Trawling Company, Limited. 1922/2.  
The Milford Tea Company, Limited. 1932/28.  
Cromwell Consolidated Gold Mining Company, Limited. 1933/39.

Given under my hand at Dunedin, this 4th day of July, 1935.

L. G. TUCK,  
Assistant Registrar of Companies.

## ILFORD LIMITED.

In the matter of ILFORD LIMITED, a company incorporated in England.

PURSUANT to section 338 of the Companies Act, 1933, Ilford Limited hereby gives notice of its intention to cease to have a place of business in New Zealand after the expiry of three months from the date of the first publication of this notice in the *New Zealand Gazette*—namely, from the 27th day of June, 1935.

Dated at Auckland, this 18th day of June, 1935.

GEORGE C. GORRIE,  
R. S. H. BISS,  
Attorneys in New Zealand.

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## THE NEW ZEALAND INSTITUTE FOR THE BLIND RATING EXEMPTION ACT, 1935.

In the matter of a Private Bill intended to be brought into the General Assembly of New Zealand intitled "The New Zealand Institute for the Blind Rating Exemption Act, 1935."

NOTICE is hereby given pursuant to the Standing Orders of the General Assembly of New Zealand relating to Private Bills that The New Zealand Institute for the Blind (hereinafter called "the Institute") will, within fourteen days after the commencement of the session of the General Assembly of New Zealand to be held next after the date of this notice, present a petition to the General Assembly of New Zealand through the Honourable The Speaker and Members of the House of Representatives praying and applying for leave to bring in a Private Bill to be called "The New Zealand Institute for the Blind Rating Exemption Act, 1935."

The objects of the Bill are—

1. To exempt all lands and buildings for the time being vested in and actually used by the Institute for the purposes of any school, workroom, shop, gardens, recreation-grounds, residences, or residential quarters for blind persons and held

otherwise than as an endowment situated in the City of Auckland from liability for payment of rates (not being rates charged or levied by the Auckland City Council in respect of water supplied by the Auckland City Council in respect of such said lands and buildings), as if the said lands and buildings had always been excluded from the definition of "rateable property" in the Rating Act, 1925.

2. To authorize the Auckland City Council to remit all rates heretofore charged or levied against the Institute in respect of the above-mentioned lands and buildings (not being rates for or in respect of water supplied by the said Council in respect of the said lands and buildings).

3. To obtain such modification of the Rating Act, 1925, as may be necessary to give effect to the objects of the Bill. Copies of the said Bill will be deposited at the Private Bill Office, Parliament Buildings, Wellington, on or before the 13th day after the commencement of the session.

Dated this 1st day of July, 1935.

MAHONY, DIGNAN, AND FOSTER,  
Solicitors for the Promoter.

38 Shortland Street, Auckland.

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## DISSOLUTION OF PARTNERSHIP.

NOTICE is hereby given that the partnership heretofore subsisting between FRANCIS HENRY HUDSON and THOMAS MILNES, carrying on business as Leather-manufacturers at Sawyer's Bay, has been dissolved as from the date hereof. All debts due to and owing by the said late firm will be received and paid respectively by the said Francis Henry Hudson who will continue to carry on the said business under the style or firm of F. H. Hudson and Co.

Dated the 18th day of June, 1935.

F. H. HUDSON.  
THOS. MILNES.

Signed by the above-named Francis Henry Hudson and Thomas Milnes in the presence of—J. M. Paterson, Solicitor, Dunedin.

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## NORTHCOTE BOROUGH COUNCIL.

I, ROBERT MARTIN, Mayor of the Borough of Northcote, hereby certify that at a special meeting of the Northcote Borough Council held on the 12th June, 1935, a resolution (as hereunder set out) in accordance with the provisions of section 9 of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, was passed; and that at a special meeting of the said Northcote Borough Council held on the 27th June, 1935, the minutes of the above resolution passed at the special meeting held on the 12th June, 1935, were confirmed.

## Resolution.

"That pursuant to section 9 of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and any amendments thereto, and by the Northcote Borough Loan Conversion Orders, 1935 (Nos. 1 and 2), and of all other powers thereto enabling, the Northcote Borough Council hereby resolved to issue new securities in conversion of the existing securities to which the said Orders Nos. 1 and 2 apply, such new securities to be issued and conversion effected subject to and in accordance with the said Conversion Orders Nos. 1 and 2."

R. MARTIN,  
Mayor.

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## VICTORIA BUILDINGS, LIMITED.

In the matter of the Companies Act, 1933, and in the matter of VICTORIA BUILDINGS, LIMITED.

NOTICE is hereby given that the Order of the Supreme Court dated the 8th day of June, 1935, confirming the reduction of capital of the above-mentioned company from £5,000 to £3,010, and the minute approved by the Court showing with respect to the capital of the company as altered the several particulars required by the above statute, was registered by the Registrar of Companies at Auckland on the 27th day of June, 1935.

Dated at Hamilton, this 3rd day of July, 1935.

BELL AND JOHNSON,  
Solicitors for the company.

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WAIPAWA COUNTY COUNCIL.

CONVERSION under the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and the Waipawa County Loans Conversion Order, 1935, of debentures or other securities issued in respect of the following loans:—

Loans to be converted.

Name.	Amount.	Rate of Interest.		Date of Maturity.
		Original.	Existing.	
1. Wakarara and Makaretu North Block Road Loan	700*	4½	4½	16/8/50
2. College Road Loan	4,000*	4½	4½	16/8/52
3. College Road Supplementary Loan	400*	4½	4½	16/2/53
4. Lindsay Water-race Reconstruction Loan	500*	4½	4½	16/8/55
5. New Bridges Construction Loan of £10,000 (part)	5,000*	4½	4½	16/8/57
6. Ditto .. .. .	2,000*	4½	4½	16/8/58
7. " " " " " "	3,000*	4½	4½	16/2/59
8. Bridges and Roadmaking Plant Loan of £5,000, 1921	5,000	5½	4½	1/9/57
9. Bridges and Roadmaking Plant Loan of £5,000, 1926, No. 2 (part)	3,000	6	4½	29/10/62
10. Bridges and Roadmaking Plant Loan of £5,000, 1926	5,000	6	4½	1/8/62
11. Main Highways and Bridges Loan of £45,000 (part)	10,000	6	4½	1/6/62
12. Main Highways and Bridges Loan of £45,000, 1925 (part)	15,000	6	4½	1/7/63
13. Rangitoto Road Loan of £600	600	6	4½	1/3/51
14. The Pendle Hill Suspension Bridge Loan of £1,000 (1931)	1,000	5½	4½	26/12/55
Total .. .. .	55,200			

\* Less amount of principal repaid as at date of conversion.

Notice is hereby given to the holders of debentures or other securities issued in respect of the above-mentioned loans that the Waipawa County Council intends to convert all such debentures or other securities (except those in respect of which dissent is duly signified) into new debentures having new maturity dates and bearing interest at 4½ per cent. per annum.

The conversion will take effect from 31st July, 1935. Applications for conversion must be made in writing and be accompanied by the securities to which it relates.

Dissent from conversion of any existing debentures or other securities may be signified by the holder by notice in writing delivered to the County Clerk on or before the 14th day of August, 1935.

If notice of dissent from the conversion of any debentures or other securities is not received by that date the securities will be converted.

The rate of interest on any new debentures or other securities in respect of which dissent is signified as aforesaid will, by virtue of section 18 of the above-mentioned Act, be reduced to two-thirds of the original rate as from 31st July, 1935.

Further particulars as to the new debentures and the conversion generally may be obtained from the County Clerk, Waipawa County Council, Waipawa, or from Messrs. J. H. Francis and Co., Ltd., 161 A.M.P. Buildings, Wellington.

Dated the 1st day of July, 1935.  
346 N. M. PAULSEN, Chairman.

MEDICAL REGISTRATION.

I, GORDON WILLIAM MOORE, M.B., Ch.B., University of New Zealand, 1935, now residing in Ashburton, hereby give notice that I intend applying on the 4th August next to have my name placed on the Medical Register of the Dominion of New Zealand; and that I have deposited the evidence of my qualification in the office of the Department of Health at Christchurch.

Dated at Ashburton, 4th July, 1935.  
GORDON WILLIAM MOORE.  
Public Hospital, Ashburton. 348

WHAKATANE COUNTY COUNCIL.

NOTICE OF INTENTION TO TAKE LAND.

In the matter of the Counties Act, 1920, and of the Public Works Act, 1928.

NOTICE is hereby given that the Whakatane County Council proposes under the provisions of the above-mentioned Acts to execute a certain public work—namely, the construction of a road—and for the purposes of such public work the lands described in the Schedule hereto are required to be taken: And notice is hereby further given that a plan of the lands so required to be taken is deposited in the public office of the said Whakatane County Council, situated at the Strand, Whakatane, and is open for inspection without fee by all persons during ordinary office hours: All persons affected by the execution of the said public work or by the taking of such lands who have any well-grounded objections to the execution of the said public work or to the taking of the said lands must state their objections in writing and send the same within forty (40) days from the first publication of this notice to the Clerk of the said Council at the said office.

SCHEDULE.

APPROXIMATE area of each of the parcels of land required to be taken:—

A.	B.	F.	Being
1	2	3-52	Part Lot 6 on D.P. 2493, being part Allotment 307, Waimana Parish; coloured neutral.
2	1	24-55	Part Allotment 11, Waimana Settlement; coloured blue.
0	0	2-10	Part Allotment 11, Waimana Settlement; coloured blue.
2	3	21-21	Lot 2 on D.P. 7641, being portion of Waimana No. 1A Block; coloured red.

All situated in Block III, Waimana Survey District, Whakatane County. (S.O. plan 28048.)  
Dated this 4th day of July, 1935.

C. G. LUCAS, County Clerk.

This notice was first published on the 11th day of July, 1935, in *The Bay of Plenty Press* 347

KAPOWAI AMALGAMATED GOLD MINES, LTD.

IN LIQUIDATION.

NOTICE is hereby given that the final meeting of shareholders (under section 230 of the Companies Act, 1908) will be held at the registered office of the company, National Insurance Buildings, O'Connell Street, Auckland, on Monday, the 29th day of July, 1935, at 1 p.m.

Business.—Presentation and adoption of liquidator's final accounts.  
Dated this 5th day of July, 1935.

REG. F. PERCIVAL,  
Liquidator.

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THE TE HORO SUPPLY STORES, LTD.

IN LIQUIDATION.

In the matter of the Companies Act, 1933, and in the matter of THE TE HORO SUPPLY STORES, LTD. (in Liquidation).

THE following resolution was passed on the 4th day of July, 1935:—

"Resolved that the company cannot by reason of its liabilities continue its business and that it is advisable to wind up, and that SYDNEY ERNEST BROWN, Public Accountant, Wellington, be and is hereby appointed liquidator for the purposes of such winding up."

Pursuant to section 300, subsection (7), of the Companies Act, 1933, a meeting of creditors is hereby convened for Friday, the 12th July, at 11.30 a.m., at the Real Estate Auction Rooms, 43 Panama Street, Wellington, to consider any steps which creditors may wish to take in the matter.

S. E. BROWN,  
Liquidator.

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## RAGLAN COUNTY COUNCIL.

## RESOLUTION MAKING SPECIAL RATE.

IN pursuance and exercise of the powers vested in it in that behalf by Part II of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and the Raglan County Loans Conversion Order, 1935, the Raglan County Council hereby resolves as follows:—

"That, for the purpose of providing the half-yearly instalments of principal and interest in respect of the new securities authorized to be issued by the Raglan County Council under the above-mentioned Act and Order in conversion of existing securities issued in respect of loans set out in the First Schedule to that Order, and also the instalments of principal and interest in respect of the unconverted securities issued in respect of such loans, the said Raglan County Council hereby makes and levies a special rate upon the rateable value (on the basis of the unimproved value) of all rateable property of the Raglan County Council. Such rate shall be made and levied on a differential basis for each of the several ridings of the Raglan County Council as follows:—

"On all rateable property in the Karamu Riding, a special rate of 0-1408d. in the pound.

"On all rateable property in the Karioi Riding, a special rate of 1-6555d. in the pound.

"On all rateable property in the Matakowhai Riding, a special rate of 0-0286d. in the pound.

"On all rateable property in the Onewhero Riding, a special rate of 0-2937d. in the pound.

"On all rateable property in the Pirongia Riding, a special rate of 0-1947d. in the pound.

"On all rateable property in the Pukekawa Riding, a special rate of 0-033d. in the pound.

"On all rateable property in the Port Waikato Riding, a special rate of 0-6534d. in the pound.

"On all rateable property in the Te Akau Riding, a special rate of 0-781d. in the pound.

"On all rateable property in the Waingarua Riding, a special rate of 0-4664d. in the pound.

"On all rateable property in the Whaingaroa Riding, a special rate of 0-8657d. in the pound.

"On all rateable property in the Whangape Riding, a special rate of 0-2057d. in the pound.

Such special rate shall be an annually recurring rate during the currency of such securities and be payable yearly on the 1st day of September in each and every year until the last maturity date of such securities, being the 1st day of May, 1965, or until all such securities are fully paid off."

Dated at Ngaruawahia, 4th July, 1935.

G. H. SMITH,  
County Clerk.

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## HIKURANGI TOWN BOARD.

## RESOLUTION MAKING SPECIAL RATE.

IN pursuance and in exercise of the powers vested in it in that behalf by Part II of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and the Hikurangi Town Board Loans Conversion Order, 1935 (No. 1), the Hikurangi Town Board hereby resolves as follows:—

"That, for the purpose of providing the instalments of principal and interest and other charges on the new securities authorized to be issued by the Hikurangi Town Board under the above-mentioned Act and Order in conversion of existing securities issued in respect of the loans set out in the First Schedule to that Order, the said Hikurangi Town Board hereby makes and levies a special rate of 2½d. in the pound upon the rateable value (on the basis of the unimproved value) of all rateable property of the district, and that such special rate shall be an annually recurring rate during the currency of such securities and be payable yearly on the 1st day of August in each and every year until the last maturity date of such securities, being the 1st day of June, 1955, or until all such securities are fully paid off."

CHAS. O'CALLAGHAN,  
Town Clerk.

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## HIKURANGI TOWN BOARD.

## RESOLUTION MAKING SPECIAL RATE.

IN pursuance and in exercise of the powers vested in it in that behalf by Part II of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and the Hikurangi Town Board Loans Conversion Order, 1935 (No. 2), the Hikurangi Town Board hereby resolves as follows:—

"That, for the purpose of providing the instalments of principal and interest and other charges on the new securities

authorized to be issued by the Hikurangi Town Board under the above-mentioned Act and Order in conversion of existing securities issued in respect of the loans set out in the First Schedule to that Order, the said Hikurangi Town Board hereby makes and levies a special rate of 2d. in the pound upon the rateable value (on the basis of the unimproved value) of all rateable property of the district, and that such special rate shall be an annually recurring rate during the currency of such securities and be payable yearly on the 1st day of August in each and every year until the last maturity date of such securities, being the 1st day of June, 1955, or until all such securities are fully paid off."

CHAS. O'CALLAGHAN,  
Town Clerk.

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## FOWLER AND PORTER, LIMITED.

## IN LIQUIDATION.

NOTICE is hereby given that a special resolution of the members of Fowler and Porter, Limited, was passed on the 4th day of July, 1935, that the company be wound up voluntarily.

JACOBS AND GRANT,  
Solicitors.

Palmerston North.

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## SUNLIGHT SLUICING CO., LTD.

## IN LIQUIDATION.

NOTICE is hereby given that by a resolution dated 4th July, 1935, the above company went into voluntary liquidation, the undersigned being appointed liquidator.

All persons and firms having claims against the company are requested to lodge same with the liquidator not later than Saturday, 27th July, 1935.

VAL KIRK, F.P.A.N.Z.,  
Liquidator.

Argus House, High Street, Auckland, C. 1.  
4th July, 1935.

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## G. W. INGRAM, LIMITED.

## IN LIQUIDATION.

In the matter of the Companies Act, 1933, and in the matter of G. W. INGRAM, LIMITED (in Liquidation), Auckland.

NOTICE is hereby given that a meeting of G. W. Ingram, Limited (in Liquidation), and of the creditors of the said company will be held at 12 noon on Wednesday, the 31st day of July, 1935, at the office of G. O'Halloran and Son, 51 National Bank Chambers, Shortland Street, Auckland, for the purpose of laying an account before the meeting showing how the winding-up of the company has been conducted and the property of the company disposed of.

Dated the 10th day of July, 1935.

D. C. O'HALLORAN, A.P.A.N.Z.,  
Liquidator.

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## THE GOLD DEVELOPMENT CORPORATION, LIMITED.

## IN VOLUNTARY LIQUIDATION.

NOTICE is hereby given in pursuance of section 232 of the Companies Act, 1933, that a general meeting of the members of the above company will be held in the offices of Messrs. W. A. Mitson and Co., Public Accountants, 24 Water Street, Dunedin, on Friday, 26th July, 1935, at 12 o'clock noon, for the purpose of having an account laid before the meeting showing the manner in which the winding-up of the said company has been conducted and the assets of the said company disposed of, and for hearing any explanation that may be given by the liquidator, and also of passing an extraordinary resolution disposing of the books, documents, and accounts of the company and of the liquidator thereof.

The extraordinary resolution to be submitted to such members is as follows:—

"That the books, documents, and accounts of the company and of the liquidator be kept at the office of Messrs. W. A. Mitson and Co., Public Accountants, 24 Water Street, Dunedin, for the period of six months from the date of passing this resolution, and thereafter that they be destroyed."

W. A. MITSON,  
Liquidator.

Dated at Dunedin, this 3rd day of July, 1935.

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**JAMES BARCLAY AND COMPANY, LIMITED.**

**IN VOLUNTARY LIQUIDATION.**

NOTICE is hereby given that at an extraordinary general meeting of the above-named company duly convened and held on the 3rd day of July, 1935, the following resolution was passed:—

1. That the company cannot by reason of its liabilities continue its business, and that it is advisable to wind up, and that the company be wound up by a creditors' voluntary winding up.

2. That in pursuance of section 235 of the Companies Act, 1933, ARTHUR JOHN STEED, of Wairoa, be and is hereby appointed liquidator of the company.

And that such resolutions and appointment were confirmed by a meeting of the creditors of the above-named company held on 3rd July, 1935.

Dated at Wairoa, this 4th day of July, 1935.

A. J. STEED,  
Liquidator.

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**CHANGE OF NAME OF COMPANY.**

NOTICE is hereby given that Khaki Manufacturing Company, Limited, has changed its name to Army Stores, Limited, and that the new name was this day entered on my Register of Companies in place of the former name.

Dated at Christchurch, this 4th day of July, 1935.

J. MORRISON,  
Assistant Registrar of Companies.

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**THE ANDERSON'S BAY QUARRY CO., LIMITED.**

**IN VOLUNTARY LIQUIDATION.**

NOTICE is hereby given that by resolution entered in the minute-book of the above company and dated the 6th day of July, 1935, it was resolved that the company be wound up voluntarily, and that NORMAN KENNETH SLIGO, of Dunedin, Company-manager, and HENRY KEARNS POPPELWELL, of Dunedin, Sharebroker, be appointed liquidators for the purposes of such winding up.

ADAMS BROS.,  
Solicitors for the company.

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**O. A. BRIDGEWATER AND COMPANY, LIMITED.**

**IN VOLUNTARY LIQUIDATION.**

TAKE notice that on the 29th day of June, 1935, at Christchurch, a special resolution was passed by entry in the minute-book of the company in accordance with section 300 of the Companies Act, 1933, that O. A. Bridgewater and Company, Limited, go into voluntary liquidation, and that OSMOND ARTHUR BRIDGEWATER, of Christchurch Company Director, be appointed liquidator.

Dated at Christchurch, this 8th day of July, 1935.

O. A. BRIDGEWATER,  
Liquidator.

NOTE.—A new company of the same name has been registered with the object of acquiring the assets of the above company and will carry on at 187 Hereford Street, Christchurch, the business in the past conducted by the company now in liquidation.

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**MEDICAL REGISTRATION.**

I, CHARLES MARWOOD MULES, M.B., Ch.B., New Zealand, 1935, now residing in Auckland, hereby give notice that I intend applying on the 2nd August next to have my name placed on the Medical Register of the Dominion of New Zealand; and that I have deposited the evidence of my qualification in the office of the Department of Health at Auckland.

Dated at Auckland, 2nd July, 1935.

CHARLES MARWOOD MULES.

2 Park Road, Auckland, C. 3.

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**TYRE RETREADS, LTD.**

**IN LIQUIDATION.**

In the matter of the Companies Act, 1933, and in the matter of TYRE RETREADS, LTD. (in Liquidation).

*Shareholders' Meeting.*

NOTICE is hereby given that a general meeting of the company will be held at the liquidator's office, Canterbury Chamber of Commerce, at 2.30 p.m. in the afternoon of Monday, the twenty-ninth day of July, 1935, pursuant to section 241 of the Companies Act, 1933, for the purpose of laying before the meeting the liquidator's statement and report in connection with the winding up.

*Creditors' Meeting.*

In accordance with section 241 of the Companies Act, 1933, notice is hereby given that a meeting of creditors of the above-named company will be held at the liquidator's office, Canterbury Chamber of Commerce, at 3 p.m. in the afternoon of Monday, the twenty-ninth day of July, 1935, for the purpose of receiving liquidator's final report and statement of accounts.

J. ROY SMITH,  
Liquidator.

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**R. CAMERON AND COMPANY, LIMITED.**

**IN LIQUIDATION.**

NOTICE is hereby given by the above company that a meeting of the creditors of the company will, pursuant to section 234 of the Companies Act, 1933, be held at the offices of Messrs. Hogg and Stewart, Solicitors, T. and G. Building, Grey Street, Wellington, on Tuesday, the 16th day of July, 1935, at 2.15 o'clock in the afternoon, to consider a resolution for winding up passed by the company on the 6th day of July, 1935, and to nominate one or more persons as liquidator, to fix his or their remuneration, and (if thought fit) to appoint a committee of inspection, and for the purposes of the said section 234.

Dated this 8th day of July, 1935.

HOGG AND STEWART,  
Solicitors to the company.

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**OPOTIKI BOROUGH COUNCIL.**

**RESOLUTION MAKING SPECIAL RATE.**

*Loans Conversion (No. 1).*

IN pursuance and exercise of the powers vested in it in that behalf by Part II of the Local Authorities Interest Reduction and Loans Conversion Act, 1932-33, and the Opotiki Borough Loans Conversion Order, 1935 (No. 1), the Opotiki Borough Council hereby resolves as follows:—

“That, for the purpose of providing the half-yearly instalments of principal and interest in respect of the new securities authorized to be issued by the Opotiki Borough Council under the above-mentioned Act and Order in conversion of existing securities issued in respect of the loans set out in the First Schedule to that Order, the said Opotiki Borough Council hereby makes and levies a special rate of three and one-third pence (3½d.) in the pound upon the rateable property of the district, and that such special rate shall be an annually recurring rate during the currency of such securities and be payable half-yearly on the first day of July and the first day of January in each and every year until the last maturity date of such securities, being the first day of July, 1955, or until all such securities are fully paid off.”

I, George Septimus Moody, Mayor of the Borough of Opotiki, do hereby certify that the above is a true copy of a resolution passed on the 25th day of June, 1935.

G. S. MOODY,  
Mayor.

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