## Rew South Wales.



## ANNO SECUNDO

## EDWARDI VII REGIS.

## Act No. 91, 1902.

An Act to regulate the construction and use of lifts and of scaffolding and engines used for erecting, demolishing, altering, repairing, cleaning. or painting buildings or structures, and of gear used in connection therewith; to regulate the use of steam cranes; and for purposes consequent upon or incidental to those objects. [Assented to, 1st December, 1902.]

**D**<sup>E</sup> it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows :—

## Preliminary.

1. This Act shall come into operation on the first day of Commencement and January, one thousand nine hundred and three, and may be cited as <sup>short title.</sup> the "Scaffolding and Lifts Act, 1902."

St 7822 § 29995 2.

## Scaffolding and Lifts.

Places within which Act shall operate.

2. This Act shall have effect in the Metropolitan Police District, and in such other areas as the Governor, by proclamation published in the Gazette, may direct.

Such district and each such area is referred to in this Act as a district.

1 2 4 4 4

Definitions.

- 3. In this Act—
- "Engine" means machine, crane, boiler, or other apparatus or contrivance used in creating, demolishing, altering, repairing, cleaning, or painting buildings or structures.
- "Gear" includes ladder, plank, chain, rope, fastening, hoist, stay, block, pulley, hanger, sling, brace, or other movable contrivance of a like kind.
- "Inspector" means inspector appointed under this Act.
- "Lift" means apparatus or contrivance within or attached to a building worked by any power other than hand, and comprising a movable platform by which persons or goods are raised or lowered, and includes any machinery used for working a lift.
- "Scaffolding" means any structure built up and fixed to a height exceeding eight feet from the horizontal base on which it is built up and fixed, for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and shall include any swinging stage intended to be used for any of the aforesaid purposes.

4. The Governor may, for carrying out the provisions of this Act, appoint inspectors for any districts.

## Erection of scaffolding.

5. (1) No person shall in any district commence to set up or build any scaffolding unless he has stated his intention to do so by notice in writing, under his hand, and served on an inspector for the district by being posted to him or left at such address as the Minister may, by notice in the Gazette, direct, at least twenty-four hours before such scaffolding is commenced to be set up or built.

(2) Any person who commences to set up or build in any district any scaffolding without having notified his intention to do so to the inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding twenty pounds.

(3) Provided it shall not be necessary to allow any time to elapse after the service of the notice as aforesaid in the case of an emergency arising from damage caused by lightning, explosion, fire, or rain.

Scaffolding,

Appointment of inspectors.

Notice as to the erection of scaffolding.

## Scaffolding and Lifts.

#### 10 10 19 m Scaffolding, engines, and gear.

6. All scaffolding and engines, and all gear used in connection Scaffolding, &c., to therewith in any district shall be of the description indicated in the with regulations. regulations in the Schedules hereto, and shall be set up, built, maintained, and used in accordance with such regulations.

7. The Governor may proclaim regulations annulling, amending, Governor may by proclamation amend, or adding to the regulations in the Schedules hereto. &c., Schedules.

Every proclamation made under this section shall be published in the Gazette and laid before Parliament within fourteen days after such publication, or, if Parliament is not then sitting, within fourteen days after the commencement of the session next ensuing after such publication.

The regulations contained in any such proclamation may be disallowed by resolution of either House of Parliament, in whole or in part, within one month after the proclamation has been laid before that House, and such of the regulations as have not been so disallowed shall, at the end of such period or the last of such periods, have the force of law, and be deemed to be contained in the Schedule hereto.

#### Construction of lifts.

8. (1) No person shall in a district commence to erect a lift Notice of unless he has stated his intention to do so by notice in writing, under erection of lift. his hand, served on an inspector for the district at least twenty-four hours before such lift is commenced to be erected.

and set (2) Any person who commences to erect in any district any Penalty. lift without having notified his intention to do so to the inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding twenty pounds.

#### Inspection.

9. An inspector shall from time to time inspect all lifts and Entry by inspector. all scaffolding, and all engines and gear used in connection therewith constructed or used or in course of construction in his district, and for that purpose may during working hours enter any building or premises.

10. (1) Where it appears to an inspector-

Inspector may give

- (a) that the use in his district of any lift or any scaffolding or scaffolding, &c. engine or any gear used in connection therewith would be dangerous to human life or limb, or
- (b) that with regard to any lift or any scaffolding or engine or gear used in connection therewith erected or used or in course of erection in his district the regulations in the Schedules hereto are not being complied with, a et eld

Supplemental.

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## Scaffolding and Lifts.

he may give such directions in writing to the owner of or person using such lift or the person in charge or apparently in charge of such scaffolding, engine, or gear as he thinks necessary in order to prevent accidents or to ensure a compliance with such regulations; and such person shall, unless notice of appeal is given as hereinafter provided, forthwith carry out such directions.

(2) Where an inspector gives any directions for any reason mentioned in subsection (a) aforesaid, he may at the same or at any other time order any persons forthwith to cease to use the lift or to work in connection with the scaffolding, engine, or gear until such directions or any order on appeal therefrom has been complied with.

Any such order of an inspector may be rescinded by him.

(3) The person to whom such directions have been given, or the owner of the lift or the person in charge of the operations in respect of which the scaffolding, engine, or gear is erected, used, or intended to be used, may, on giving notice to the inspector within twenty-four hours after such directions have been given appeal in person to the Government architect, or any person deputed by the Government architect to hear any such appeal. The said architect or person shall hear and determine such appeal with all reasonable despatch, and shall, by order in writing delivered to the person appealing, affirm, vary, or rescind such directions.

(4) Any person who—

- (a) refuses or fails to comply with any direction given to him by an inspector in pursuance of this section or any order on appeal therefrom; or
- (b) refuses or fails to comply with any order given to him by an inspector in pursuance of this section to cease to use a lift or to work in connection with any scaffolding, engine, or gear,

shall be liable to a penalty not exceeding fifty pounds.

## Drivers of steam-cranes.

11. (1) No person shall, in any district, act as driver in charge of any steam-crane used in connection with building operations unless he has obtained and holds a driver's certificate.

A driver's certificate shall be granted by the Government architect to any person who, after inquiry and examination he considers is trustworthy and competent to act as a driver of a steam-crane. Any certificate so granted may be cancelled by the Government architect if he considers that the holder has ceased to be trustworthy or competent as aforesaid.

(2) Any person who, after the expiration of a period of three months from the commencement of this Act, acts in a district as driver in charge of a steam-crane without holding a driver's certificate granted and in force in pursuance of this section, shall be liable to a penalty not exceeding ten pounds. Supplemental.

May order work to cease.

Appeal from inspector.

Penalty.

Driver in charge of crane to hold certificate.

Penalty.

## Scaffolding and Lifts.

## Supplemental.

12. Any person who interferes with or obstructs any inspector Obstruction of in the execution of any power or duty conferred or imposed on him by <sup>inspectors.</sup> this Act shall be liable to a penalty not exceeding four pounds.

13. All informations under this Act may be heard and deter- Recovery of mined, and all penalties may be recovered in a summary way before a <sup>penalties.</sup> court of petty sessions.

#### SCHEDULE I.

## REGULATIONS.

#### Swinging stage.

To bear three times maximum weight required; blocks to be iron, or wood, not less than four inches diameter of sheaf, consisting of double and single block; and all rope to be best Manilla, not less than two and three-quarter inches circumference.

Scaffold to consist of not less than one and a half-inch planking running full length, and width to be not more than eleven feet between supports, such supports to be of wrought-iron two and one-half inches by one-half inch, carried round stage, with loop on top to receive tackle, and bolted to planking with three-eighths inch bolts each end, strong cleat to be screwed to planking under centre.

Scaffold to have overhead or wall attachments securely attached.

Guard-rail to be placed three feet from floor, not less than nine inches sectional area; also fender board not less than nine inches on outside and both ends.

#### Bricklayers' scaffold.

Standards to be not more than eight feet apart, consisting of five inches diameter, or twenty inches sectional area, embedded twelve inches in ground, or in barrels filled with sand or earth.

Ledgers to be not more than five feet apart, or not less than fifteen inches sectional area.

Putlocks five feet long, and not less than twelve inches sectional area, and should be of hardwood.

Scaffold-boards to be not longer than twelve feet, and not less than one and a half inch thick, free from all defects. All planking to be laid butting, with two putlocks at each end, and one in centre.

All scaffolds to have twelve inches by one and a half inch fender-board on each stage, secured to standards; also guard-rail three feet high, and not less than twelve inches sectional area on each stage.

Bracing to be not less than twelve inches sectional area, and placed to the satisfaction of the inspector or his representative.

Scaffold to be secured by best Manilla-rope, not less than one and three-quarter inch circumference, and fifteen feet long, or bolts not less than five-eighths inch diameter. All lashings to be properly wedged, such wedging to be tightened after rain.

Buildings above two stories high, immediately after joist being laid, shall have a temporary covering of close planking on joists or girders, and shall remain until permanent floors are laid. All gangways to be constructed to the satisfaction of the inspector.

Internal

#### Internal scaffold-painters, plasterers, general repairs, inclusive.

Ledgers not to be less than fifteen inches sectional area, and not more than six feet apart, with standards not more than six feet apart, and with fifteen inches sectional area, and braced, as required by inspector, with ropes or bolts, as before mentioned.

#### Gantries.

Standard to be of not less than eighty-one inches sectional area, and built up of nine-inch by three-inch Oregon, bolted together with rails, not less than twenty-seven inches sectional area and cross-braces, not less than twenty-one inches sectional area; rails to be not more than eight feet apart. King posts to be not less than one hundred and forty-four inches sectional area, sole plates not less than eighty-one inches sectional area.

Truss girders connecting gantry towers. Top and bottom rails to be not less than eighty-one inches sectional area, secured with king rods, not less than one and a half inch diameter, and cross-bracing not less than twenty-seven inches sectional area, bolted to top and bottom rail, both rails to be strapped to king-posts with three-inch by five-eighths inch straps, four feet long (wrought-iron).

Crane to be properly secured to gantry with wire rope, passed over back legs and sleeper at top, and connected at bottom of each tower, or secured by wrought-iron straps top and bottom of four-inch by three-quarter inch wrought-iron, properly bolted to king-post and crane timbers.

Bolts, three-quarter inch, to be not more than three feet apart, spaced diagonal, and strap to be not less than nine feet long.

#### Lifting capacity.

Any crane must be weighted on each leg to not less than one and a half times its lifting capacity.

#### Lift-box.

Construction of lift-box to carry up to two tons. To be constructed of one and a half inch thick hardwood, with two bottom ledges six inches by three inches; cornerstraps to be six-inch by quarter-inch wrought-iron, bolted through angle of box, carrying straps to pass under ledges on bottom, and carried up sides of box, made of four-inch by five-eighths inch wrought-iron, with evelet-holes thickened to receive box chains, and securely bolted to box with half-inch bolts.

#### Ladders.

All ladders shall be of clean Oregon, with rungs of split hardwood, set in centre of stiles. No batten ladders to be used, other than roof ladders.

All ladders must stand not less than six feet above staging; where the inspector so directs, more than one set of ladders shall be used.

All ladders to be effectively lashed and to be stayed where length exceeds twentytwo feet.

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## Hydraulic or other power-Lifts, cranes, or whips.

Hydraulic machines.

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All cylinders, rams, pipes, valves, or other apparatus subjected to hydraulicpressure, shall be tested to a pressure equal to three times the proposed working pressure per square inch; and a certificate under the maker's hand that they have been a successfully tested to stand that pressure shall in all cases be furnished to the inspector before they are put into use.

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## Scaffolding and Lifts.

All hydraulic machinery having rams working in cylinders shall be provided with permanent stops (or other approved means), by which the rams will be prevented from being forced out of the cylinders, quite independent of any valve or tappet gear.

An independent screw-down pressure stop-cock shall be fitted to every machine; and in cases where more than one machine is fixed in the same building, an approved waste-cock shall be fitted to each machine.

A back-pressure valve, non-return valve, or other similar apparatus of approved kind, shall be fitted to every service-pipe.

Hydraulic cylinders are to be fitted with air and drain-pipes.

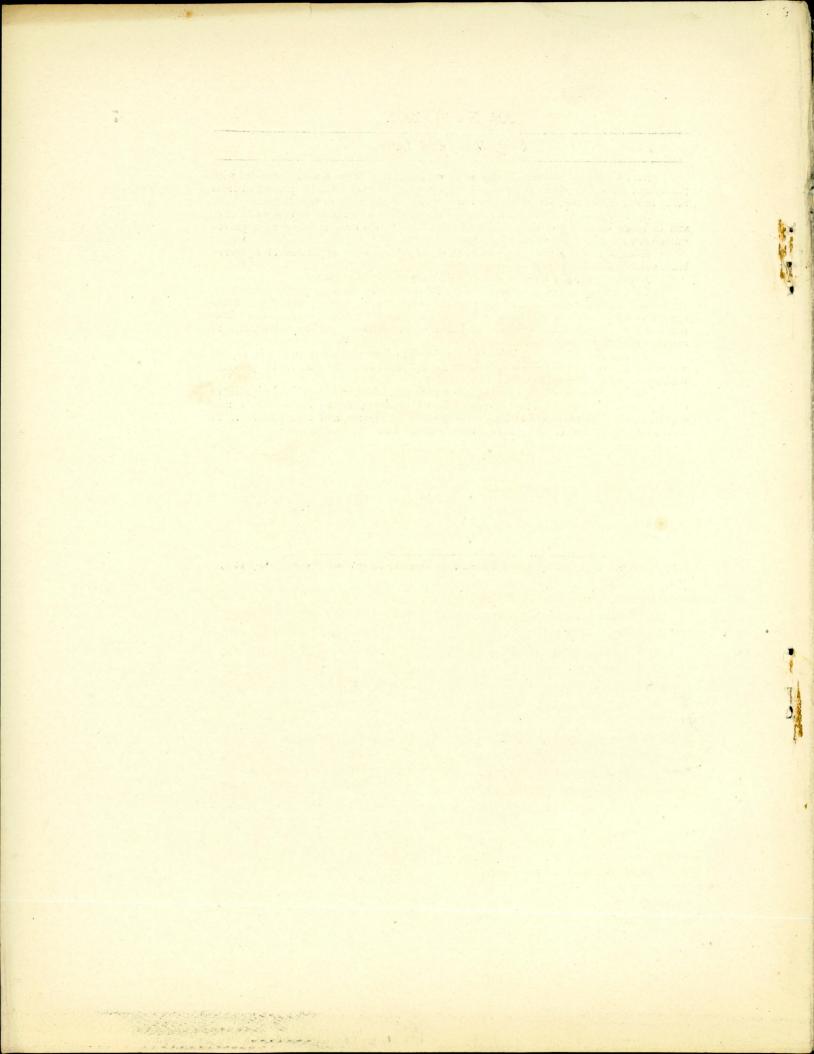
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Efficient means are to be provided for lubricating all working parts of machines. The inspector shall see and test the whole of the machinery, pipes, and other apparatus which are intended to be used before the machines are put into use. This regulation will apply to any substantial alterations in addition to or re-instatements of existing machinery and pipes.

All machinery and well holes to be enclosed to inspector's approval. In case of whip-hatches, floors to or from which goods are delivered or discharged, to be provided with approved flaps or rolling platforms.

All lifts, cranes, whips, or other like machinery, whether driven by hydraulic or other power, to be examined and inspected in all or any parts as the inspector may require or consider necessary at least once in every six months, and a certificate to be issued by inspector after such examination or inspection.

By Authority: Reprinted by WILLIAM APPLEGATE GULLICK, Government Printer, Sydney, 1908. [6d.]



I Certify that this PUBLIC BILL, which originated in the LEGISLATIVE ASSEMBLY, has finally passed the LEGISLATIVE COUNCIL and the LEGISLATIVE ASSEMBLY of NEW SOUTH WALES.

Legislative Assembly Chamber, Sydney, 19 November, 1902. } F. W. WEBB, Clerk of the Legislative Assembly.



# EDWARDI VII REGIS.

## Act No. 91, 1902.

An Act to regulate the construction and use of lifts and of scaffolding and engines used for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and of gear used in connection therewith; to regulate the use of steam cranes; and for purposes consequent upon or incidental to those objects. [Assented to, 1st December, 1902.]

**B**<sup>E</sup> it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows :---

## Preliminary. .

1. This Act shall come into operation on the first day of Commencement and January, one thousand nine hundred and three, and may be cited as short title. the "Scaffolding and Lifts Act, 1902." 2.

I have examined this Bill, and find it to correspond in all respects with the Bill as finally passed by both Houses.

J. H. CANN, Chairman of Committees of the Legislative Assembly.

Places within which Act shall operate. 2. This Act shall have effect in the Metropolitan Police District, and in such other areas as the Governor, by proclamation published in the Gazette, may direct.

Such district and each such area is referred to in this Act as a district.

Definitions.

3. In this Act—

- "Engine" means machine, crane, boiler, or other apparatus or contrivance used in erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures.
- "Gear" includes ladder, plank, chain, rope, fastening, hoist, stay, block, pulley, hanger, sling, brace, or other movable contrivance of a like kind.
- "Inspector" means inspector appointed under this Act.
- "Lift" means apparatus or contrivance within or attached to a building worked by any power other than hand, and comprising a movable platform by which persons or goods are raised or lowered, and includes any machinery used for working a lift.
- "Scaffolding" means any structure built up and fixed to a height exceeding eight feet from the horizontal base on which it is built up and fixed, for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and shall include any swinging stage intended to be used for any of the aforesaid purposes.

4. The Governor may, for carrying out the provisions of this Act, appoint inspectors for any districts.

## Erection of scaffolding.

5. (1) No person shall in any district commence to set up or build any scaffolding unless he has stated his intention to do so by notice in writing, under his hand, and served on an inspector for the district by being posted to him or left at such address as the Minister may, by notice in the Gazette, direct, at least twenty-four hours before such scaffolding is commenced to be set up or built.

(2) Any person who commences to set up or build in any district any scaffolding without having notified his intention to do so to the inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding twenty pounds.

(3) Provided it shall not be necessary to allow any time to elapse after the service of the notice as aforesaid in the case of an emergency arising from damage caused by lightning, explosion, fire, or rain.

Scaffolding,

Notice as to the erection of

Appointment of

inspectors.

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## Scaffolding and Lifts.

## Scaffolding, engines, and gear.

6. All scaffolding and engines, and all gear used in connection Scaffolding, &c., to therewith in any district shall be of the description indicated in the bein accordance with regulations. regulations in the Schedules hereto, and shall be set up, built, maintained, and used in accordance with such regulations.

7. The Governor may proclaim regulations annulling, amending, Governor may by or adding to the regulations in the Schedules hereto. &c., Schedules.

Every proclamation made under this section shall be published in the Gazette and laid before Parliament within fourteen days after such publication, or, if Parliament is not then sitting, within fourteen days after the commencement of the session next ensuing after such publication.

The regulations contained in any such proclamation may be disallowed by resolution of either House of Parliament, in whole or in part, within one month after the proclamation has been laid before that House, and such of the regulations as have not been so disallowed shall, at the end of such period or the last of such periods, have the force of law, and be deemed to be contained in the Schedule hereto.

## Construction of lifts.

8. (1) No person shall in a district commence to erect a lift Notice of unless he has stated his intention to do so by notice in writing, under erection of lift. his hand, served on an inspector for the district at least twenty-four hours before such lift is commenced to be erected.

(2) Any person who commences to erect in any district any Penalty. respective lift without having notified his intention to do so to the inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding twenty pounds.

## Inspection.

9. An inspector shall from time to time inspect all lifts and Entry by inspector. all scaffolding, and all engines and gear used in connection therewith constructed or used or in course of construction in his district, and for that purpose may during working hours enter any building or premises.

10. (1) Where it appears to an inspector—

- (a) that the use in his district of any lift or any scaffolding or directions as to scaffolding, &c. engine or any gear used in connection therewith would be dangerous to human life or limb, or
- (b) that with regard to any lift or any scaffolding or engine or gear used in connection therewith erected or used or in course of erection in his district the regulations in the Schedules hereto are not being complied with,

Inspector may give

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proclamation amend;

## Scaffolding and Lifts.

he may give such directions in writing to the owner of or person using such lift or the person in charge or apparently in charge of such scaffolding, engine, or gear as he thinks necessary in order to prevent accidents or to ensure a compliance with such regulations; and such person shall, unless notice of appeal is given as hereinafter provided, forthwith carry out such directions.

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(2) Where an inspector gives any directions for any reason mentioned in subsection (a) aforesaid, he may at the same or at any other time order any persons forthwith to cease to use the lift or to work in connection with the scaffolding, engine, or gear until such directions or any order on appeal therefrom has been complied with.

Any such order of an inspector may be rescinded by him.

(3) The person to whom such directions have been given, or the owner of the lift or the person in charge of the operations in respect of which the scaffolding, engine, or gear is erected, used, or intended to be used, may, on giving notice to the inspector within twenty-four hours after such directions have been given appeal in person to the Government architect, or any person deputed by the Government architect to hear any such appeal. The said architect or person shall hear and determine such appeal with all reasonable despatch, and shall, by order in writing delivered to the person appealing, affirm, vary, or rescind such directions.

Penalty.

(4) Any person who—

(a) refuses or fails to comply with any direction given to him by an inspector in pursuance of this section or any order on appeal therefrom; or

(b) refuses or fails to comply with any order given to him by an inspector in pursuance of this section to cease to use a lift or

to work in connection with any scaffolding, engine, or gear, shall be liable to a penalty not exceeding fifty pounds.

## Drivers of steam-cranes.

of any steam-crane used in connection with building operations unless he has obtained and holds a driver's certificate.

A driver's certificate shall be granted by the Government architect to any person who, after inquiry and examination he considers is trustworthy and competent to act as a driver of a steam-crane. Any certificate so granted may be cancelled by the Government architect if he considers that the holder has ceased to be trustworthy or competent as aforesaid.

(2) Any person who, after the expiration of a period of 17 three months from the commencement of this Act, acts in a district as driver in charge of a steam-crane without holding a driver's certificate granted and in force in pursuance of this section, shall be liable to a penalty not exceeding ten pounds. Supplemental.

Driver in charge of crane to hold certificate.

Penalty.

May order work to

cease.

Appeal from

inspector.

## Scaffolding and Lifts.

## Supplemental.

12. Any person who interferes with or obstructs any inspector Obstruction of in the execution of any power or duty conferred or imposed on him by inspectors. this Act shall be liable to a penalty not exceeding four pounds.

13. All informations under this Act may be heard and deter- Recovery of mined, and all penalties may be recovered in a summary way before a <sup>penalties.</sup> court of petty sessions.

#### SCHEDULE I.

#### REGULATIONS.

#### Swinging stage.

To bear three times maximum weight required; blocks to be iron, or wood, not less than four inches diameter of sheaf, consisting of double and single block; and all rope to be best Manilla, not less than two and three-quarter inches circumference.

Scaffold to consist of not less than one and a half-inch planking running full length, and width to be not more than eleven feet between supports, such supports to be of wrought-iron two and one-half inches by one-half inch, carried round stage, with loop on top to receive tackle, and bolted to planking with three-eighths inch bolts each end, strong cleat to be screwed to planking under centre.

Scaffold to have overhead or wall attachments securely attached.

Guard-rail to be placed three feet from floor, not less than nine inches sectional area; also fender board not less than nine inches on outside and both ends.

#### Bricklayers' scaffold.

Standards to be not more than eight feet apart, consisting of five inches diameter, or twenty inches sectional area, embedded twelve inches in ground, or in barrels filled with sand or earth.

Ledgers to be not more than five feet apart, or not less than fifteen inches sectional area.

Putlocks five feet long, and not less than twelve inches sectional area, and should be of hardwood.

Scaffold-boards to be not longer than twelve feet, and not less than one and a half inch thick, free from all defects. All planking to be laid butting, with two putlocks at each end, and one in centre.

All scaffolds to have twelve inches by one and a half inch fender-board on each stage, secured to standards; also guard-rail three feet high, and not less than twelve inches sectional area on each stage.

Bracing to be not less than twelve inches sectional area, and placed to the satisfaction of the inspector or his representative.

Scaffold to be secured by best Manilla rope, not less than one and three-quarter inch circumference, and fifteen feet long, or bolts not less than five-eighths inch diameter. All lashings to be properly wedged, such wedging to be tightened after rain.

Buildings above two stories high, immediately after joist being laid, shall have a temporary covering of close planking on joists or girders, and shall remain until permanent floors are laid. All gangways to be constructed to the satisfaction of the inspector.

Internal

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#### Internal scaffold-painters, plasterers, general repairs, inclusive.

Ledgers not to be less than fifteen inches sectional area, and not more than six feet apart, with standards not more than six feet apart, and with fifteen inches sectional area, and braced, as required by inspector, with ropes or bolts, as before mentioned.

#### Gantries.

Standard to be of not less than eighty-one inches sectional area, and built up of nine-inch by three-inch Oregon, bolted together with rails, not less than twenty-seven inches sectional area, and cross-braces, not less than twenty-one inches sectional area; rails to be not more than eight feet apart. King posts to be not less than one hundred and forty-four inches sectional area, sole plates not less than eighty-one inches sectional area.

Truss girders connecting gantry towers. Top and bottom rails to be not less than eighty-one inches sectional area, secured with king rods, not less than one and a half inch diameter, and cross-bracing not less than twenty-seven inches sectional area, bolted to top and bottom rail, both rails to be strapped to king-posts with three-inch by five-eighths inch straps, four feet long (wrought-iron).

Crane to be properly secured to gantry with wire rope, passed over back legs and sleeper at top, and connected at bottom of each tower, or secured by wrought-iron straps top and bottom of four-inch by three-quarter inch wrought-iron, properly bolted to king-post and crane timbers.

Bolts, three-quarter inch, to be not more than three feet apart, spaced diagonal, and strap to be not less than nine feet long.

#### Lifting capacity.

Any crane must be weighted on each leg to not less than one and a half times its lifting capacity.

#### Lift-box.

Construction of lift-box to carry up to two tons. To be constructed of one and a half inch thick hardwood, with two bottom ledges six inches by three inches; cornerstraps to be six-inch by quarter-inch wrought-iron, bolted through angle of box, carrying straps to pass under ledges on bottom, and carried up sides of box, made of four-inch by five-eighths inch wrought-iron, with eylet-holes thickened to receive box chains, and securely bolted to box with half-inch bolts.

#### Ladders.

All ladders shall be of clean Oregon, with rungs of split hardwood, set in centre of stiles. No batten ladders to be used, other than roof ladders.

All ladders must stand not less than six feet above staging; where the inspector so directs, more than one set of ladders shall be used.

All ladders to be effectively lashed and to be stayed where length exceeds twentytwo feet.

#### SCHEDULE II.

#### Hydraulic or other power-Lifts, cranes, or whips.

draulic machines.

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All cylinders, rams, pipes, valves, or other apparatus subjected to dydraulic pressure, shall be tested to a pressure equal to three times the proposed working pressure per square inch; and a certificate under the maker's hand that they have been successfully tested to stand that pressure shall in all cases be furnished to the inspector before they are put into use.

All

## Scaffolding and Lifts.

All hydraulic machinery having rams working in cylinders shall be provided with permanent stops (or other approved means), by which the rams will be prevented from being forced out of the cylinders, quite independent of any valve or tappet gear.

An independent screw-down pressure stop-cock shall be fitted to every machine; and in cases where more than one machine is fixed in the same building, an approved waste-cock shall be fitted to each machine.

A back-pressure valve, non-return valve, or other similar apparatus of approved kind, shall be fitted to every service-pipe.

Hydraulic cylinders are to be fitted with air and drain-pipes.

Efficient means are to be provided for lubricating all working parts of machines.

The inspector shall see and test the whole of the machinery, pipes, and other apparatus which are intended to be used before the machines are put into use. This regulation will apply to any substantial alterations in addition to or re-instatements of existing machinery and pipes.

existing machinery and pipes. All machinery and well holes to be enclosed to inspector's approval. In case of whip-hatches, floors to or from which goods are delivered or discharged, to be provided with approved flaps or rolling platforms.

All lifts, cranes, whips, or other like machinery, whether driven by hydraulic or other power, to be examined and inspected in all or any parts as the inspector may require or consider necessary at least once in every six months, and a certificate to be issued by inspector after such examination or inspection.

In the name and on the behalf of His Majesty I assent to this Act.

HARRY H. RAWSON, Governor.

State Government House, Sydney, 1st December, 1902.

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## SCAFFOLDING AND LIFTS BILL.

## SCHEDULE of the Amendments referred to in Message of 16th July, 1902.

Page 1, clause 1, line 7. Omit "February" insert "October" 

 Page 1, clause 1, line 7.
 Omit "February theory theory of the set 1902."

 Page 1, clause 1, line 8.
 Omit "1901" insert "1902."

 Page 2, clause 3, line 10.
 Omit "means" insert "includes"

 Page 2, clause 3, line 10.
 After "ladder" insert "plank "

 Page 2, clause 3, line 11.
 After "other" insert "movable"

 Page 2, clause 3, line 12. After "contrivance" insert "of a like kind" 

 Page 2, clause
 3, line 12. After "contrivance" insert "OI a like kind "

 Page 2, clause
 3, line 14. After "within" insert "or attached to "

 Page 2, clause
 3, line 18. Omit "material, works, or" insert "any"

 Page 2, clause
 3, line 18. Omit "set up or built" insert "built up and fixed "

 Page 2, clause
 3, line 19. Omit "six" insert "eight"

 Page 2, clause
 3, line 20. Omit "set up or built" insert "built up and fixed "

 Page 2, clause
 3. Line 20. Omit "set up or built" insert "built up and fixed "

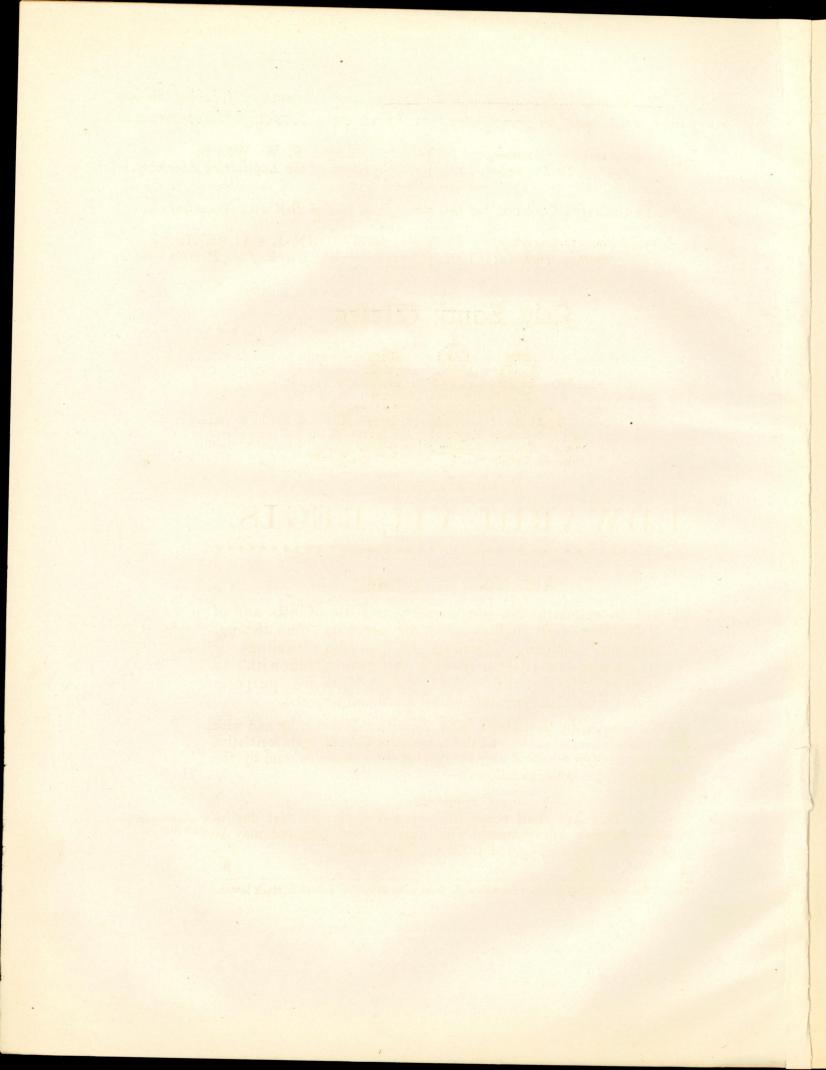
 Page 2, clause
 3. Line 20. Omit "set up or built" insert "built up and fixed "

 Page 2, clause
 3. Line 20. Omit "set up or built" insert "built up and fixed "

 Page 2, clause
 3. At end of clause add " and shall include any swinging stage in 
 "tended to be used for any of the aforesaid purposes" Page 2, clause 5, line 36. Omit "person" insert "inspector" Page 2, clause 5, line 37. Omit "fifty" insert "twenty" Page 2, clause 5. At end of clause add "(3) Provided it shall not be necessary to "allow any time to elapse after the service of the notice as aforesaid in "the case of an emergency arising from damage caused by lightning, " explosion, fire, or rain " Page 3, clause 6, line 4. Add "s" to Schedule Page 3, clause 7, line 7. Add "s" to Schedule Page 3, clause 8, line 20. omit "construct" insert "erect" Page 3, clause 8, line 23. Omit "constructd" insert "erected" Page 3, clause 8, line 24. Omit "construct" insert "erect" Page .3, clause 8, line 26. Omit "person" insert " inspector " Page 3, clause 8, line 27. Omit "fifty" insert "twenty" Page 3, clause 9, line 31. Omit "engines" Page 3, clause 9, line 31. Before "gear" insert "engines and" Page 3, clause 10, lines 39 and 40. Omit "scaffolding, engine, or any such gear con-"structed" insert "lift or any scaffolding, or engine, or gear used in " connection therewith, erected " Page 3, clause 10, line 41. Omit "construction" insert "erection" Page 3, clause 10, line 42. Add "s" to Schedule Page 5, Schedule, line 8. After "Schedule" insert "I" Page 5, Schedule, line 10. Omit "scaffold" insert "stage" Page 5, Schedule, line 11. After "iron" insert " or wood " Page 5, Schedule, line 14. Omit "two" insert "not less than one and a half" Page 5, Schedule, line 21. Omit " front " insert " outside " Page 5, Schedule, line 29. Omit "split (not sawn) to ensure the length fibres being "intact"

- Page 6, Schedule, line 36. Omit "four feet six inches" insert " six feet"
- Page 6. After Schedule I insert new Schedule II.

"c 110-



This PUBLIC BILL originated in the LEGISLATIVE ASSEMBLY, and, having this day passed, is now ready for presentation to the LEGISLATIVE COUNCIL for its concurrence.

Legislative Assembly Chamber, Sydney, 19 December, 1901. Clerk of the Legislative Assembly.

F. W. WEBB,

The LEGISLATIVE COUNCIL has this day agreed to this Bill with Amendments.

Legislative Council Chamber, Sydney, 16th July, 1902. JOHN J. CALVERT, Clerk of the Parliaments.





## ANNO SECUNDO REGIS. EDWARDI

#### Act No. , 1902.

An Act to regulate the construction and use of lifts and of scaffolding and engines used for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and of gear used in connection therewith; to regulate the use of steam cranes; and for purposes consequent upon or incidental to those objects.

) E it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows :---

#### Preliminary.

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1449

1. This Act shall come into operation on the first day of Commencement and February October, one thousand nine hundred and two, and may be short title. cited as the "Scaffolding and Lifts Act, 1901 1902." 122 -

2.

Nore. - The words to be omitted are ruled through ; those to be inserted are printed in black letter.

2. This Act shall have effect in the Metropolitan Police Places within which District, and in such other areas as the Governor, by proclamation Act shall operate. published in the Gazette, may direct.

Such district and each such area is referred to in this Act as a 5 district.

3. In this Act—

Definitions.

- "Engine" means machine, crane, boiler, or other apparatus or contrivance used in erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures.
- 10 "Gear" means includes ladder, plank, chain, rope, fastening, hoist, stay, block, pulley, hanger, sling, brace, or other mcvable contrivance of a like kind.

"Inspector" means inspector appointed under this Act.

- "Lift" means apparatus or contrivance within or attached to a building worked by any power other than hand, and comprising a movable platform by which persons or goods are raised or lowered, and includes any machinery used for working a lift.
- "Scaffolding" means material, works, or any structure set-up-or built built up and fixed to a height exceeding six eight feet from the horizontal base on which it is set-up-or-built built up and fixed, for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and shall include any swinging stage intended to be used for any of the aforesaid purposes.

25 4. The Governor may, for carrying out the provisions of this Appointment of Act, appoint inspectors for any districts.

## Erection of scaffolding.

5. (1) No person shall in any district commence to set up or Notice as to the build any scaffolding unless he has stated his intention to do so by erection of scaffolding.
30 notice in writing, under his hand, and served on an inspector for the district by being posted to him or left at such address as the Minister may, by notice in the Gazette, direct, at least twenty-four hours before such scaffolding is commenced to be set up or built.

(2) Any person who commences to set up or build in any
 35 district any scaffolding without having notified his intention to do so to the person inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding fifty twenty pounds.

(3) Provided it shall not be necessary to allow any time to 40 elapse after the service of the notice as aforesaid in the case of an emergency arising from damage caused by lightning, explosion, fire, or rain. Scaffolding,

15

## Scaffolding, engines, and gear.

6. All scaffolding and engines, and all gear used in connection scaffolding, &c., to therewith in any district shall be of the description indicated in the be in accordance with regulations. regulations in the Schedules hereto, and shall be set up, built, maintained, 5 and used in accordance with such regulations.

7. The Governor may proclaim regulations annulling, amending, Governor may by or adding to the regulations in the Schedules hereto.

proclamation amend, &c., Schedules.

Every proclamation made under this section shall be published in the Gazette and laid before Parliament within fourteen days after

10 such publication, or, if Parliament is not then sitting, within fourteen days after the commencement of the session next ensuing after such publication.

The regulations contained in any such proclamation may be disallowed by resolution of either House of Parliament, in whole or in 15 part, within one month after the proclamation has been laid before that House, and such of the regulations as have not been so disallowed shall, at the end of such period or the last of such periods, have the force of law, and be deemed to be contained in the Schedule hereto.

## Construction of lifts.

20 8. (1) No person shall in a district commence to construct erect a Notice of lift unless he has stated his intention to do so by notice in writing, construction under his hand, served on an inspector for the district at least twenty. under his hand, served on an inspector for the district at least twentyfour hours before such lift is commenced to be constructed erected.

(2) Any person who commences to construct erect in any Penalty. 25 district any lift without having notified his intention to do so to the person inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding fifty twenty pounds.

#### Inspection.

30 9. An inspector shall from time to time inspect all lifts and Entry by inspector. all scaffolding, engines, and all engines and gear used in connection therewith constructed or used or in course of construction in his district, and for that purpose may during working hours enter any building or premises.

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10. (1) Where it appears to an inspector-

Inspector may give scaffolding, &c.

- (a) that the use in his district of any lift or any scaffolding or directions as to engine or any gear used in connection therewith would be dangerous to human life or limb, or
- (b) that with regard to any seaffolding, engine, or any such gear constructed lift or any scaffolding or engine or gear used in connection therewith erected or used or in course of construction erection in his district the regulations in the Schedules hereto are not being complied with, he

## Scaffolding and Lifts.

he may give such directions in writing to the owner of or person using such lift or the person in charge or apparently in charge of such scaffolding, engine, or gear as he thinks necessary in order to prevent accidents or to ensure a compliance with such regulations; and such 5 person shall, unless notice of appeal is given as hereinafter provided, forthwith carry out such directions.

(2) Where an inspector gives any directions for any reason May order work to mentioned in subsection (a) aforesaid, he may at the same or at any cease. other time order any persons forthwith to cease to use the lift or to 10 work in connection with the scaffolding, engine, or gear until such

directions or any order on appeal therefrom has been complied with. Any such order of an inspector may be rescinded by him.

(3) The person to whom such directions have been given, Appeal from or the owner of the lift or the person in charge of the operations in inspector.
15 respect of which the scaffolding, engine, or gear is erected, used, or intended to be used, may, on giving notice to the inspector within twenty-four hours after such directions have been given appeal in person to the Government architect, or any person deputed by the Government architect to hear any such appeal. The said architect or 20 person shall hear and determine such appeal with all reasonable despatch, and shall, by order in writing delivered to the person appeal-

ing, affirm, vary, or rescind such directions. (4) Any person who—

Penalty.

- (a) refuses or fails to comply with any direction given to him by an inspector in pursuance of this section or any order on appeal therefrom; or
- (b) refuses or fails to comply with any order given to him by an inspector in pursuance of this section to cease to use a lift or to work in connection with any scaffolding, engine, or gear,

30 shall be liable to a penalty not exceeding fifty pounds.

## Drivers of steam-cranes.

11. (1) No person shall, in any district, act as driver in charge Driver in charge of crane to hold of any steam-crane used in connection with building operations unless certificate.

35 A driver's certificate shall be granted by the Government architect to any person who, after inquiry and examination he considers is trustworthy and competent to act as a driver of a steam-crane. Any certificate so granted may be cancelled by the Government architect if he considers that the holder has ceased to be trustworthy or competent 40 as aforesaid.

(2) Any person who, after the expiration of a period of Penalty. three months from the commencement of this Act, acts in a district as driver in charge of a steam-crane without holding a driver's certificate granted and in force in pursuance of this section, shall be liable to a 45 penalty not exceeding ten pounds. Supplemental.

## Scaffolding and Lifts.

## Supplemental.

12. Any person who interferes with or obstructs any inspector Obstruction of in the execution of any power or duty conferred or imposed on him by inspectors. this Act shall be liable to a penalty not exceeding four pounds.

13. All informations under this Act may be heard and deter- Recovery of mined, and all penalties may be recovered in a summary way before a <sup>penalties</sup>. court of petty sessions.

#### SCHEDULE I.

#### REGULATIONS.

## Swinging seaffold. stage.

To bear three times maximum weight required; blocks to be iron, or wood, not less than four inches diameter of sheaf, consisting of double and single block; and all rope to be best Manilla, not less than two and three-quarter inches circumference.

Scaffold to consist of two not less than one and a half-inch planking running 15 full length, and width to be not more than eleven feet between supports, such supports to be of wrought-iron two and one-half inches by one-half inch, carried round stage, with loop on top to receive tackle, and bolted to planking with three-eighths inch bolts each end, strong cleat to be screwed to planking under centre.

Scaffold to have overhead or wall attachments securely attached.

20 Guard-rail to be placed three feet from floor, not less than nine inches sectional area; also fender board not less than nine inches on front outside and both ends.

#### Bricklayers' scaffold.

Standards to be not more than eight feet apart, consisting of five inches diameter, or twenty inches sectional area, embedded twelve inches in ground, or in barrels filled 25 with sand or earth.

Ledgers to be not more than five feet apart, or not less than fifteen inches sectional area.

Putlocks five feet long, and not less than twelve inches sectional area, and should be of hardwood, split-(not-sawn), to ensure the longth fibres-being intact.

30 Scaffold-boards to be not longer than twelve feet, and not less than one and a half inch thick, free from all defects. All planking to be laid butting, with two putlocks at each end, and one in centre.

All scaffolds to have twelve inches by one and a half inch fender-board on each stage, secured to standards; also guard-rail three feet high, and not less than twelve **35** inches sectional area on each stage.

Bracing to be not less than twelve inches sectional area, and placed to the satisfaction of the inspector or his representative.

Scaffold to be secured by best Manilla rope, not less than one and three-quarter inch circumference, and fifteen feet long, or bolts not less than five eighths inch diameter. 45 All lashings to be properly wedged, such wedging to be tightened after rain.

45 All lashings to be properly wedged, such wedging to be tightened after rain. Buildings above two stories high, immediately after joist being laid, shall have a temporary covering of close planking on joists or girders, and shall remain until permanent floors are laid. All gangways to be constructed to the satisfaction of the inspector.

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Internal

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#### Internal scaffold-painters, plasterers, general repairs, inclusive.

Ledgers not to be less than fifteen inches sectional area, and not more than six feet apart, with standards not more than six feet apart, and with fifteen inches sectional area, and braced, as required by inspector, with ropes or bolts, as before mentioned.

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#### Gantries.

Standard to be of not less than eighty-one inches sectional area, and built up of nine-inch by three-inch Oregon, bolted together with rails, not less than twenty-seven inches sectional area, and cross-braces, not less than twenty-one inches sectional area; rails to be not more than eight feet apart. King posts to be not less than one hundred

10 and forty-four inches sectional area, sole plates not less than eighty-one inches sectional area.

Truss girders connecting gantry towers. Top and bottom rails to be not less than eighty-one inches sectional area, secured with king rods, not less than one and a half inch diameter, and cross-bracing not less than twenty-seven inches sectional area, 15 bolted to top and bottom rail, both rails to be strapped to king-posts with three-inch by five-eighths inch straps, four feet long (wrought-iron).

Crane to be properly secured to gantry with wire rope, passed over back legs and sleeper at top, and connected at bottom of each tower, or secured by wrought-iron straps top and bottom of four-inch by three-quarter inch wrought-iron, properly bolted to 20 king-post and crane timbers.

Bolts, three-quarter inch, to be not more than three feet apart, spaced diagonal, and strap to be not less than nine feet long.

#### Lifting capacity.

Any crane must be weighted on each leg to not less than one and a half times its 25 lifting capacity.

## Lift-box.

Construction of lift-box to carry up to two tons. To be constructed of one and a half inch thick hardwood, with two bottom ledges six inches by three inches; cornerstraps to be six-inch by quarter-inch wrought-iron, bolted through angle of box, carrying 30 straps to pass under ledges on bottom, and carried up sides of box, made of four-inch by five-eighths inch wrought-iron, with eylet-holes thickened to receive box chains, and securely bolted to box with half-inch bolts.

#### Ladders.

All ladders shall be of clean Oregon, with rungs of split hardwood, set in centre 35 of stiles. No batten ladders to be used, other than roof ladders.

All ladders must stand not less than four feet six inches six feet above staging; where the inspector so directs, more than one set of ladders shall be used.

All ladders to be effectively lashed and to be stayed where length exceeds twentytwo feet.

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#### SCHEDULE II.

#### Hydraulic or other power-Lifts, cranes, or whips.

All cylinders, rams, pipes, valves, or other apparatus subjected to hydraulic Hydraulic pressure, shall be tested to a pressure equal to three times the proposed working machines. pressure per square inch; and a certificate under the maker's hand that they 45 have been successfully tested to stand that pressure shall in all cases be

furnished to the inspector before they are put into use.

All

## Scaffolding and Lifts.

All hydraulic machinery having rams working in cylinders shall be provided with permanent stops (or other approved means), by which the rams will be prevented from being forced out of the cylinders, quite independent of any valve or tappet gear.

An independent screw-down pressure stop-cock shall be fitted to every 5 machine; and in cases where more than one machine is fixed in the same building an approved waste-cock shall be fitted to each machine.

A back-pressure valve, non-return valve, or other similar apparatus of approved kind, shall be fitted to every service-pipe. 10

Hydraulic cylinders are to be fitted with air and drain pipes.

Efficient means are to be provided for lubricating all working parts of machines.

The inspector shall see and test the whole of the machinery, pipes, and other apparatus which are intended to be used before the machines are put into 15 use. This regulation will apply to any substantial alterations in addition to or

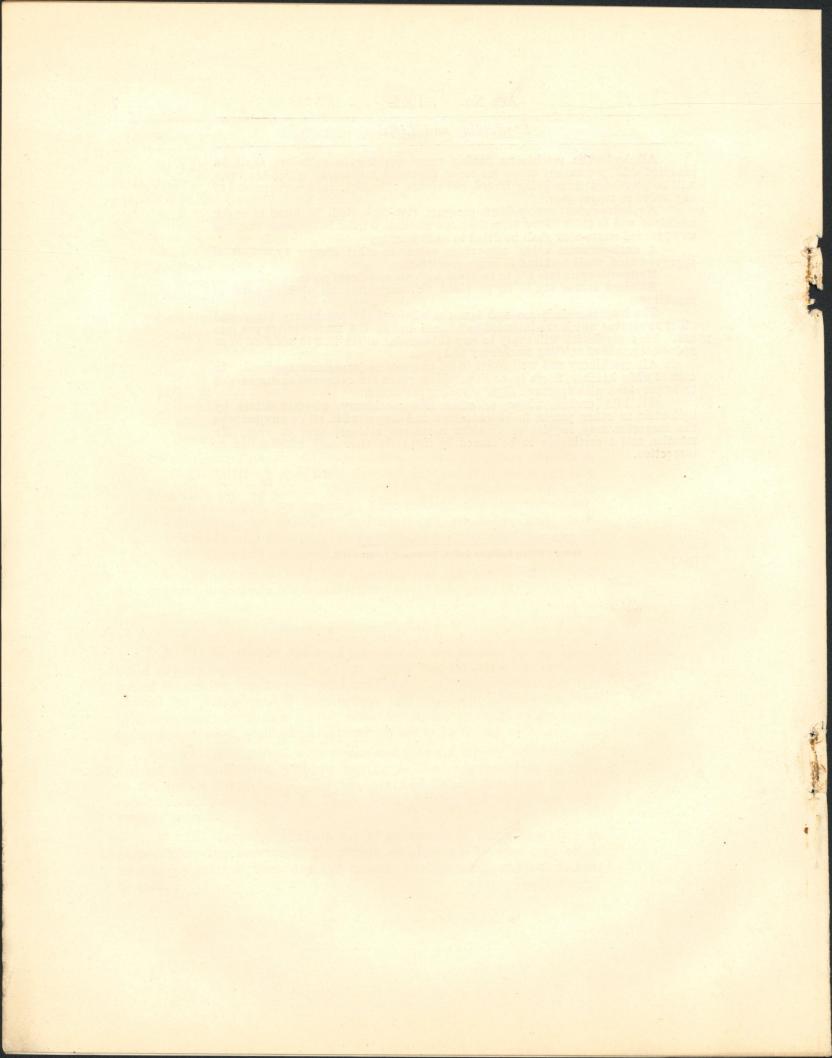
re-instatements of existing machinery and pipes.

All machinery and well holes to be enclosed to inspector's approval. In case of whip hatches, floors to or from which goods are delivered or discharged to be provided with approved flaps or rolling platforms.

All lifts, cranes, whips, or other like machinery, whether driven by hydraulic or other power, to be examined and inspected in all or any parts as 20 the inspector may require or consider necessary at least once in every six months, and a certificate to be issued by inspector after such examination or inspection.

[9d.]

Sydney : William Applegate Gullick, Government Printer .- 1902.



This PUBLIC BILL originated in the LEGISLATIVE ASSEMBLY, and, having this day passed, is now ready for presentation to the LEGISLATIVE COUNCIL for its concurrence.

Legislative Assembly Chamber, Sydney, 19 December, 1901.

F. W. WEBB, Clerk of the Legislative Assembly.

The LEGISLATIVE COUNCIL has this day agreed to this Bill with Amendments.

Legislative Council Chamber, July, 1902. Sydney,

Clerk of the Parliaments.



## ANNO SECUNDO EDWARDI

#### Act No. , 1902.

An Act to regulate the construction and use of lifts and of scaffolding and engines used for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and of gear used in connection therewith; to regulate the use of steam cranes; and for purposes consequent upon or incidental to those objects.

) E it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows :---

#### Preliminary.

5

1. This Act shall come into operation on the first day of commencement and February October, one thousand nine hundred and two, and may be short title. cited as the "Scaffolding and Lifts Act, 1901 1902." 122 -1449

2.

Note. - The words to be omitted are ruled through; those to be inserted are printed in black letter.

2. This Act shall have effect in the Metropolitan Police Places within which District, and in such other areas as the Governor, by proclamation Act shall operate. published in the Gazette, may direct.

Such district and each such area is referred to in this Act as a 5 district.

3. In this Act—

"Engine" means machine, crane, boiler, or other apparatus or contrivance used in erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures.

"Gear" means includes ladder, plank, chain, rope, fastening, hoist, stay, block, pulley, hanger, sling, brace, or other movable contrivance of a like kind.

"Inspector" means inspector appointed under this Act.

"Lift" means apparatus or contrivance within or attached to a building worked by any power other than hand, and comprising a movable platform by which persons or goods are raised or lowered, and includes any machinery used for working a lift.

"Scaffolding" means material, works, or any structure set up or built built up and fixed to a height exceeding six eight feet from the horizontal base on which it is set-up or built built up and fixed, for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and shall include any swinging stage intended to be used for any of the aforesaid purposes.

25 4. The Governor may, for carrying out the provisions of this Appointment of Act, appoint inspectors for any districts.

## Erection of scaffolding.

5. (1) No person shall in any district commence to set up or Notice as to the build any scaffolding unless he has stated his intention to do so by erection of 30 notice in writing, under his hand, and served on an inspector for the

district by being posted to him or left at such address as the Minister may, by notice in the Gazette, direct, at least twenty-four hours before such scaffolding is commenced to be set up or built.

(2) Any person who commences to set up or build in any 35 district any scaffolding without having notified his intention to do so to the person inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding fifty twenty pounds.

(3) Provided it shall not be necessary to allow any time to 40 elapse after the service of the notice as aforesaid in the case of an emergency arising from damage caused by lightning, explosion, fire, or rain. Scaffolding,

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Definitions.

## Scaffolding, engines, and gear.

6. All scaffolding and engines, and all gear used in connection scaffolding, &c., to therewith in any district shall be of the description indicated in the bein accordance with regulations in the Schedules hereto, and shall be set up, built, maintained, 5 and used in accordance with such regulations.

7. The Governor may proclaim regulations annulling, amending, Governor may by or adding to the regulations in the Schedules hereto.

Every proclamation made under this section shall be published in the Gazette and laid before Parliament within fourteen days after

10 such publication, or, if Parliament is not then sitting, within fourteen days after the commencement of the session next ensuing after such publication.

The regulations contained in any such proclamation may be disallowed by resolution of either House of Parliament, in whole or in 15 part, within one month after the proclamation has been laid before that

House, and such of the regulations as have not been so disallowed shall, at the end of such period or the last of such periods, have the force of law, and be deemed to be contained in the Schedule hereto.

## Construction of lifts.

- 20 8. (1) No person shall in a district commence to construct erect a Notice of lift unless he has stated his intention to do so by notice in writing, construction under his hand, served on an inspector for the district at least twentyfour hours before such lift is commenced to be constructed erected.
- (2) Any person who commences to construct erect in any Penalty. 25 district any lift without having notified his intention to do so to the person inspector, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding fifty twenty pounds.

## Inspection.

- 30 9. An inspector shall from time to time inspect all lifts and Entry by inspector. all scaffolding, engines, and all engines and gear used in connection therewith constructed or used or in course of construction in his district, and for that purpose may during working hours enter any building or premises. 35
  - 10. (1) Where it appears to an inspector-
    - (a) that the use in his district of any lift or any scaffolding or directions as to engine or any gear used in connection therewith would be dangerous to human life or limb, or
    - (b) that with regard to any seaffolding, engine, or any such gear constructed lift or any scaffolding or engine or gear used in connection therewith erected or used or in course of construction erection in his district the regulations in the Schedules hereto are not being complied with, he

Inspector may give scaffolding, &c.

proclamation amend, &c., Schedules.

he may give such directions in writing to the owner of or person using such lift or the person in charge or apparently in charge of such scaffolding, engine, or gear as he thinks necessary in order to prevent accidents or to ensure a compliance with such regulations; and such 5 person shall, unless notice of appeal is given as hereinafter provided, forthwith carry out such directions.

(2) Where an inspector gives any directions for any reason May order work to mentioned in subsection (a) aforesaid, he may at the same or at any cease. other time order any persons forthwith to cease to use the lift or to

10 work in connection with the scaffolding, engine, or gear until such directions or any order on appeal therefrom has been complied with.

Any such order of an inspector may be rescinded by him.

(3) The person to whom such directions have been given, Appeal from inspector. or the owner of the lift or the person in charge of the operations in

15 respect of which the scaffolding, engine, or gear is erected, used, or intended to be used, may, on giving notice to the inspector within twenty-four hours after such directions have been given appeal in person to the Government architect, or any person deputed by the Government architect to hear any such appeal. The said architect or 20 person shall hear and determine such appeal with all reasonable

despatch, and shall, by order in writing delivered to the person appealing, affirm, vary, or rescind such directions.

(4) Any person who—

Penalty.

- (a) refuses or fails to comply with any direction given to him by an inspector in pursuance of this section or any order on appeal therefrom; or
- (b) refuses or fails to comply with any order given to him by an inspector in pursuance of this section to cease to use a lift or to work in connection with any scaffolding, engine, or gear,

30 shall be liable to a penalty not exceeding fifty pounds.

## Drivers of steam-cranes.

11. (1) No person shall, in any district, act as driver in charge Driver in charge of any steam-crane used in connection with building operations unless of crane to hold. he has obtained and holds a driver's certificate.

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A driver's certificate shall be granted by the Government architect to any person who, after inquiry and examination he considers is trustworthy and competent to act as a driver of a steam-crane. Any certificate so granted may be cancelled by the Government architect if he considers that the holder has ceased to be trustworthy or competent 40 as aforesaid.

(2) Any person who, after the expiration of a period of Penalty. three months from the commencement of this Act, acts in a district as driver in charge of a steam-crane without holding a driver's certificate granted and in force in pursuance of this section, shall be liable to a Supplemental. 45 penalty not exceeding ten pounds.

## Supplemental.

12. Any person who interferes with or obstructs any inspector Obstruction of in the execution of any power or duty conferred or imposed on him by inspectors. this Act shall be liable to a penalty not exceeding four pounds.

5 13. All informations under this Act may be heard and deter- Recovery of mined, and all penalties may be recovered in a summary way before a penalties. court of petty sessions.

#### SCHEDULE I.

#### REGULATIONS.

#### Swinging seaffold. stage.

To bear three times maximum weight required; blocks to be iron, or wood, not less than four inches diameter of sheaf, consisting of double and single block; and all rope to be best Manilla, not less than two and three-quarter inches circumference.

Scaffold to consist of two- not less than one and a half-inch planking running 15 full length, and width to be not more than eleven feet between supports, such supports to be of wrought-iron two and one-half inches by one-half inch, carried round stage, with loop on top to receive tackle, and bolted to planking with three-eighths inch bolts each end, strong cleat to be screwed to planking under centre.

Scaffold to have overhead or wall attachments securely attached.

20 Guard-rail to be placed three feet from floor, not less than nine inches sectional area; also fender board not less than nine inches on front outside and both ends.

#### Bricklayers' scaffold.

Standards to be not more than eight feet apart, consisting of five inches diameter, or twenty inches sectional area, embedded twelve inches in ground, or in barrels filled 25 with sand or earth.

Ledgers to be not more than five feet apart, or not less than fifteen inches sectional area.

Putlocks five feet long, and not less than twelve inches sectional area, and should be of hardwood, split-(not sawn), to ensure the length fibres being intact.

30 Scaffold-boards to be not longer than twelve feet, and not less than one and a half inch thick, free from all defects. All planking to be laid butting, with two putlocks at each end, and one in centre.

All scaffolds to have twelve inches by one and a half inch fender-board on each stage, secured to standards; also guard-rail three feet high, and not less than twelve **35** inches sectional area on each stage.

Bracing to be not less than twelve inches sectional area, and placed to the satisfaction of the inspector or his representative.

Scaffold to be secured by best Manilla rope, not less than one and three-quarter inch circumference, and fifteen feet long, or bolts not less than five eighths inch diameter. 45 All lashings to be properly wedged, such wedging to be tightened after rain.

Buildings above two stories high, immediately after joist being laid, shall have a temporary covering of close planking on joists or girders, and shall remain until permanent floors are laid. All gangways to be constructed to the satisfaction of the inspector.

Internal

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#### Internal scaffold-painters, plasterers, general repairs, inclusive.

Ledgers not to be less than fifteen inches sectional area, and not more than six feet apart, with standards not more than six feet apart, and with fifteen inches sectional area, and braced, as required by inspector, with ropes or bolts, as before mentioned.

#### Gantries.

Standard to be of not less than eighty-one inches sectional area, and built up of nine-inch by three-inch Oregon, bolted together with rails, not less than twenty-seven inches sectional area, and cross-braces, not less than twenty-one inches sectional area; rails to be not more than eight feet apart. King posts to be not less than one hundred and forty-four inches sectional area; sole pletes not less than one hundred

10 and forty-four inches sectional area, sole plates not less than eighty-one inches sectional area.

Truss girders connecting gantry towers. Top and bottom rails to be not less than eighty-one inches sectional area, secured with king rods, not less than one and a half inch diameter, and cross-bracing not less than twenty-seven inches sectional area,

15 bolted to top and bottom rail, both rails to be strapped to king-posts with three-inch by five-eighths inch straps, four feet long (wrought-iron).

Crane to be properly secured to gantry with wire rope, passed over back legs and sleeper at top, and connected at bottom of each tower, or secured by wrought-iron straps top and bottom of four-inch by three-quarter inch wrought-iron, properly bolted to 20 king-post and crane timbers.

Bolts, three-quarter inch, to be not more than three feet apart, spaced diagonal, and strap to be not less than nine feet long.

#### Lifting capacity.

Any crane must be weighted on each leg to not less than one and a half times its 25 lifting capacity.

## Lift-box.

Construction of lift-box to carry up to two tons. To be constructed of one and a half inch thick hardwood, with two bottom ledges six inches by three inches; cornerstraps to be six-inch by quarter-inch wrought-iron, bolted through angle of box, carrying 30 straps to pass under ledges on bottom, and carried up sides of box, made of four-inch by five-eighths inch wrought-iron, with eylet-holes thickened to receive box chains, and securely bolted to box with half-inch bolts.

#### Ladders.

All ladders shall be of clean Oregon, with rungs of split hardwood, set in centre 35 of stiles. No batten ladders to be used, other than roof ladders.

All ladders must stand not less than four feet six inches six feet above staging; where the inspector so directs, more than one set of ladders shall be used.

All ladders to be effectively lashed and to be stayed where length exceeds twentytwo feet.

#### SCHEDULE II.

#### Hydraulic or other power-Lifts, cranes, or whips.

All cylinders, rams, pipes, valves, or other apparatus subjected to hydraulic Hydraulic pressure, shall be tested to a pressure equal to three times the proposed working machines. pressure per square inch; and a certificate under the maker's hand that they 45 have been successfully tested to stand that pressure shall in all cases be furnished to the inspector before they are put into use.

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All hydraulic machinery having rams working in cylinders shall be provided with permanent stops (or other approved means), by which the rams will be prevented from being forced out of the cylinders, quite independent of any valve or tappet gear.

5 An independent screw-down pressure stop-cock shall be fitted to every machine; and in cases where more than one machine is fixed in the same building an approved waste-cock shall be fitted to each machine.

A back-pressure valve, non-return valve, or other similar apparatus of approved kind, shall be fitted to every service-pipe.

10 Hydraulic cylinders are to be fitted with air and drain pipes.

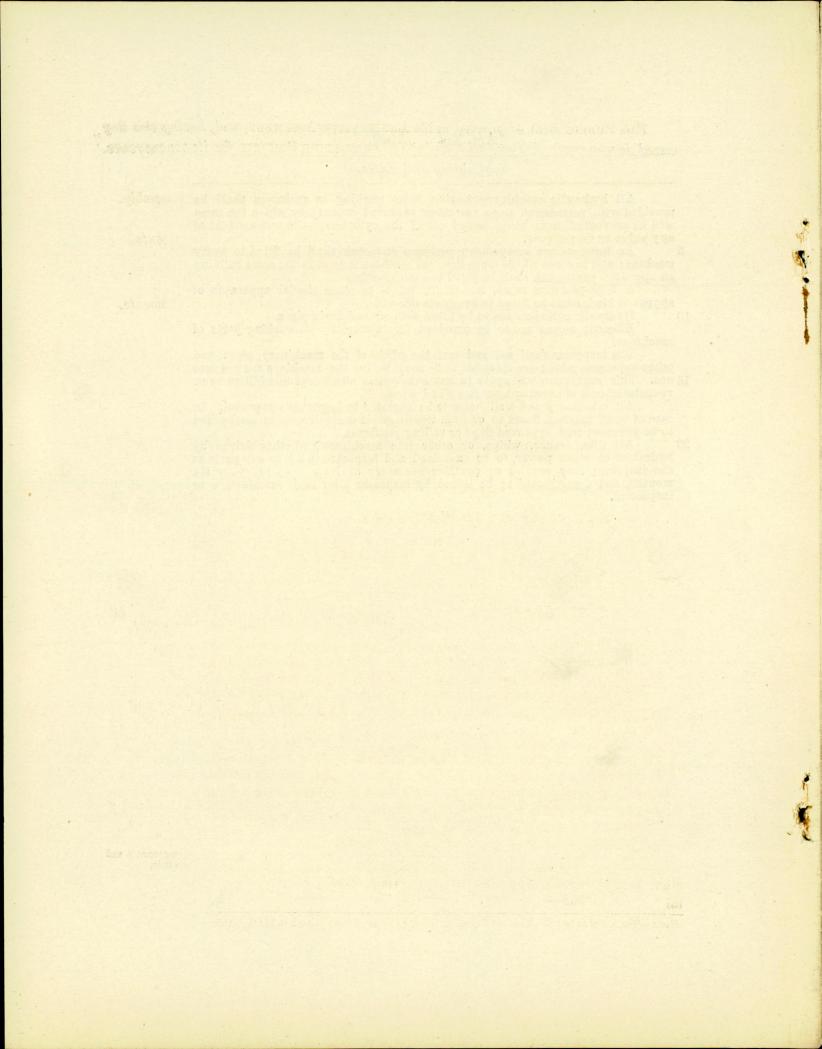
Efficient means are to be provided for lubricating all working parts of machines.

The inspector shall see and test the whole of the machinery, pipes, and other apparatus which are intended to be used before the machines are put into 15 use. This regulation will apply to any substantial alterations in addition to or

re-instatements of existing machinery and pipes.

All machinery and well holes to be enclosed to inspector's approval. In case of whip hatches, floors to or from which goods are delivered or discharged to be provided with approved flaps or rolling platforms.

20 All lifts, cranes, whips, or other like machinery, whether driven by hydraulic or other power, to be examined and inspected in all or any parts as the inspector may require or consider necessary at least once in every six months, and a certificate to be issued by inspector after such examination or inspection.



Tegislative Council.

## SCAFFOLDING AND LIFTS BILL.

(New Clauses to be proposed in Committee of the Whole.)

By MR. SUTTOR-

## Hydraulic or other power-Lifts, cranes, or whips.

All cylinders, rams, pipes, valves, or other apparatus Hydraulic machines. subjected to hydraulic pressure, shall be tested to two thousand four hundred pounds pressure per square inch; and a certificate under the maker's hand that they have been successfully tested to stand that pressure shall in all cases be furnished to the inspector before they are put into use.

All hydraulic machinery having rams working in cylinders shall be provided with permanent stops (or other approved means), by which the rams will be prevented from being forced out of the cylinders, quite independent of any valve or tappett gear.

An independent screw-down pressure stop-cock shall be fitted to every machine; and in cases where more than one machine is fixed in the same building an approved waste-cock shall be fitted to each machine.

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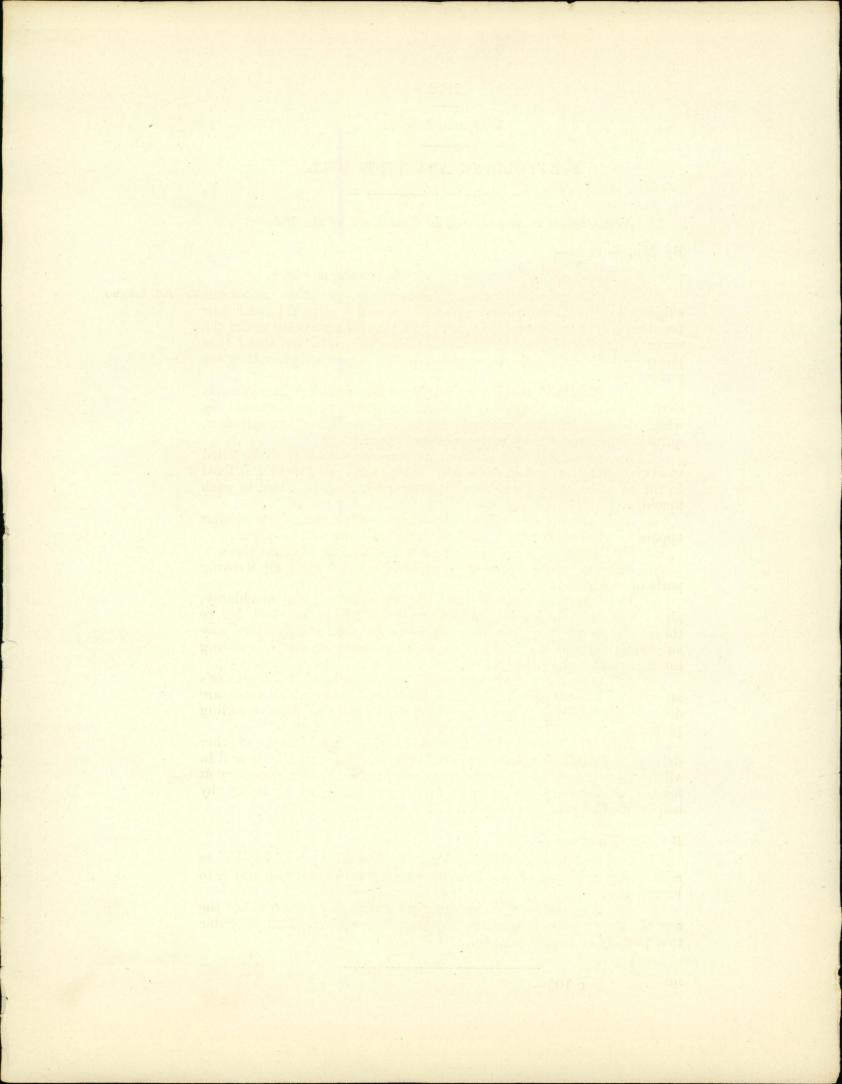
### By MR. FLOWERS-

1449

Nothing in this Act shall be deemed to be intended to relieve any employer of any liability which would otherwise attach to him at law.

Any person who knowingly permits any person under the age of twenty years to work on any swinging scaffold shall be liable to a penalty of *twenty* pounds.

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This PUBLIC BILL originated in the LEGISLATIVE ASSEMBLY, and, having this day passed, is now ready for presentation to the LEGISLATIVE COUNCIL for its concurrence.

Legislative Assembly Chamber, Sydney, 19 December, 1901. }

F. W. WEBB, Clerk of the Legislative Assembly.

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# New South Wales.



## ANNO PRIMO

# EDWARDI VII REGIS.

## Act No. , 1901.

An Act to regulate the construction and use of lifts and of scaffolding and engines used for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures, and of gear used in connection therewith; to regulate the use of steam cranes; and for purposes consequent upon or incidental to those objects.

BE it enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows :---

## Preliminary.

5 1. This Act shall come into operation on the first day of Commencement and February, one thousand nine hundred and two, and may be cited as short title. the "Scaffolding and Lifts Act, 1901."

 This Act shall have effect in the Metropolitan Police Places within which District, and in such other areas as the Governor, by proclamation Act shall operate.
 published in the Gazette, may direct.

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Such district and each such area is referred to in this Act as a district.

3. In this Act—

Definitions.

- "Engine" means machine, crane, boiler, or other apparatus or contrivance used in erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures.
- "Gear" means ladder, chain, rope, fastening, hoist, stay, block, pulley, hanger, sling, brace, or other contrivance.
- "Inspector" means inspector appointed under this Act.
- "Lift" means apparatus or contrivance within a building worked by any power other than hand, and comprising a movable platform by which persons or goods are raised or lowered, and includes any machinery used for working a lift. "Scaffolding" means material, works, or structure set up or
  - built to a height exceeding six feet from the horizontal base on which it is set up or built, for erecting, demolishing, altering, repairing, cleaning, or painting buildings or structures.

4. The Governor may, for carrying out the provisions of this Appointment of 20 Act, appoint inspectors for any districts.

## Erection of scaffolding.

5. (1) No person shall in any district commence to set up or Notice as to the build any scaffolding unless he has stated his intention to do so by erection of scaffolding, notice in writing, under his hand, and served on an inspector for the 25 district by being posted to him or left at such address as the

Minister may, by notice in the Gazette, direct, at least twenty-four hours before such scaffolding is commenced to be set up or built.

(2) Any person who commences to set up or build in any district any scaffolding without having notified his intention to do so 30 to the person, in the manner and before the time in this section mentioned, shall be liable to a penalty not exceeding fifty pounds.

## Scaffolding, engines, and gear.

6. All scaffolding and engines, and all gear used in connection Scaffolding, &c., to therewith in any district shall be of the description indicated in the be in accordance with regulations.
35 regulations in the Schedule hereto, and shall be set up, built, maintained, and used in accordance with such regulations.

7. The Governor may proclaim regulations annulling, amending, Governor may by proclamation amend, ac., Schedule.

Every proclamation made under this section shall be published 40 in the Gazette and laid before Parliament within fourteen days after

such publication, or, if Parliament is not then sitting, within fourteen days after the commencement of the session next ensuing after such publication. The

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#### ; 1901: ..... dal. Act No.

## Scaffolding and Lifts.

The regulations contained in any such proclamation may be disallowed by resolution of either House of Parliament, in whole or in part, within one month after the proclamation has been laid before that House, and such of the regulations as have not been so disallowed 5 shall, at the end of such period or the last of such periods, have the force of law, and be deemed to be contained in the Schedule hereto.

## Construction of lifts.

8. (1) No person shall in a district commence to construct a Notice of lift unless he has stated his intention to do so by notice in writing, construction of 10 under his hand, served on an inspector for the district at least twenty-four hours before such lift is commenced to be constructed.

(2) Any person who commences to construct in any district Penalty. any lift without having notified his intention to do so to the person, in the manner and before the time in this section mentioned, shall be 15 liable to a penalty not exceeding fifty pounds.

## Inspection.

9. An inspector shall from time to time inspect all lifts and Entry by inspector. all scaffolding, engines, and all gear used in connection therewith

constructed or used or in course of construction in his district, and 20 for that purpose may during working hours enter any building or premises.

10. (1) Where it appears to an inspector—

- (a) that the use in his district of any lift or any scaffolding or directions as to engine or any gear used in connection therewith would be dangerous to human life or limb, or
- (b) that with regard to any scaffolding, engine, or any such gear constructed or used or in course of construction in his district the regulations in the Schedule hereto are not being complied with,

30 he may give such directions in writing to the owner of or person using such lift or the person in charge or apparently in charge of such scaffolding, engine, or gear as he thinks necessary in order to prevent accidents or to ensure a compliance with such regulations; and such person shall, unless notice of appeal is given as hereinafter provided, 35 forthwith carry out such directions.

(2) Where an inspector gives any directions for any reason May order work to mentioned in subsection (a) aforesaid, he may at the same or at any cease. other time order any persons forthwith to cease to use the lift or to work in connection with the scaffolding, engine, or gear until such 40 directions or any order on appeal therefrom has been complied with.

Any such order of an inspector may be rescinded by him.

Inspector may give scaffolding, &c.

(3) The person to whom such directions have been given, Appeal from or the owner of the lift or the person in charge of the operations in inspector. respect of which the scaffolding, engine, or gear is erected, used, or intended to be used, may, on giving notice to the inspector within 5 twenty-four hours after such directions have been given appeal in person to the Government architect, or any person deputed by the Government architect to hear any such appeal. The said architect or person shall hear and determine such appeal with all reasonable despatch, and shall, by order in writing delivered to the person appeal-10 ing, affirm, vary, or rescind such directions.

(4) Any person who—

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(a) refuses or fails to comply with any direction given to him by an inspector in pursuance of this section or any order on appeal therefrom; or

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(b) refuses or fails to comply with any order given to him by an inspector in pursuance of this section to cease to use a lift or to work in connection with any scaffolding, engine, or gear.

shall be liable to a penalty not exceeding fifty pounds.

## Drivers of steam-cranes.

20 11. (1) No person shall, in any district, act as driver in charge Driver in charge of any steam-crane used in connection with building operations unless of crane to hold he has obtained and holds a driver's certificate.

A driver's certificate shall be granted by the Government architect to any person who, after inquiry and examination he considers 25 is trustworthy and competent to act as a driver of a steam-crane. Any certificate so granted may be cancelled by the Government architect if he considers that the holder has ceased to be trustworthy or competent as aforesaid.

(2) Any person who, after the expiration of a period of Penalty. 30 three months from the commencement of this Act, acts in a district as driver in charge of a steam-crane without holding a driver's certificate granted and in force in pursuance of this section, shall be liable to a penalty not exceeding ten pounds.

## Supplemental.

35 12. Any person who interferes with or obstructs any inspector Obstruction of in the execution of any power or duty conferred or imposed on him by inspectors. this Act shall be liable to a penalty not exceeding four pounds.

13. All informations under this Act may be heard and deter- Recovery of mined, and all penalties may be recovered in a summary way before a <sup>penaltics.</sup>
 40 court of petty sessions.

Penalty.

## SCHEDULE.

## REGULATIONS.

## Swinging scaffold.

To bear three times maximum weight required ; blocks to be iron, not less than 5 four inches diameter of sheaf, consisting of double and single block; and all rope to be best Manilla, not less than two and three-quarter inches circumference.

Scaffold to consist of two-inch planking running full length, and width to be not more than eleven feet between supports, such supports to be of wrought-iron two and one-half inches by one-half inch, carried round stage, with loop on top to receive tackle, 10 and bolted to planking with three-eighths inch bolts each end, strong cleat to be screwed to planking under centre. Scaffold to have overhead or wall attachments securely attached.

Guard-rail to be placed three feet from floor, not less than nine inches sectional area; also fender board not less than nine inches on front and both ends.

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#### Bricklayers' scaffold.

Standard to be not more than eight feet apart, consisting of five inches diameter, or twenty inches sectional area, embedded twelve inches in ground, or in barrels filled with sand or earth.

Ledgers to be not more than five feet apart, or not less than fifteen inches 20 sectional area.

Putlocks five feet long, and not less than twelve inches sectional area, and should be of hardwood, split (not sawn), to ensure the length fibres being intact.

Scaffold-boards to be not longer than twelve feet, and not less than one and a half inch thick, free from all defects. All planking to be laid butting, with two putlocks 25 at each end, and one in centre.

All scaffolds to have twelve inches by one and a half inch fender-board on each stage, secured to standards; also guard-rail three feet high, and not less than twelve inches sectional area on each stage.

Bracing to be not less than twelve inches sectional area, and placed to the satis-

30 faction of the inspector or his representative. Scaffold to be secured by best Manilla rope, not less than one and three-quarter inch circumference, and fifteen feet long, or bolts not less than five-eighths inch diameter. All lashings to be properly wedged, such wedging to be tightened after rain.

Buildings above two stories high, immediately after joist being laid, shall have 35 a temporary covering of close planking on joists or girders, and shall remain until permanent floors are laid. All gangways to be constructed to the satisfaction of the inspector.

#### Internal scaffold-painters, plasterers, general repairs, inclusive.

Ledgers not to be less than fifteen inches sectional area, and not more than six 40 feet apart, with standards not more than six feet apart, and with fifteen inches sectional area, and braced, as required by inspector, with ropes or bolts, as before mentioned.

#### Gantries.

Standard to be of not less than eighty-one inches sectional area, and built up of nine-inch by three-inch Oregon, bolted together with rails, not less than twenty-seven 45 inches sectional area, and cross-braces, not less than twenty-one inches sectional area; rails to be not more than eight feet apart. King posts to be not less than one hundred and forty-four inches sectional area, sole plates not less than eighty-one inches sectional area

Truss girders connecting gantry towers. Top and bottom rails to be not less 50 than eighty-one inches sectional area, secured with king rods, not less than one and a 314-B half

half inch diameter, and cross-bracing not less than twenty-seven inches sectional area, bolted to top and bottom rail, both rails to be strapped to king-posts with three-inch by five-eighths inch straps, four feet long (wrought-iron).

Crane to be properly secured to gantry with wire rope, passed over back legs and 5 sleeper at top, and connected at bottom of each tower, or secured by wrought-iron straps top and bottom of four-inch by three-quarter inch wrought-iron, properly bolted to king-post and crane timbers.

Bolts, three-quarter inch, to be not more than three feet apart, spaced diagonal, and strap to be not less than nine feet long.

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#### Lifting capacity.

Any crane must be weighted on each leg to not less than one and a half times its lifting capacity.

#### Lift-box.

Construction of lift-box to carry up to two tons. To be constructed of one and 15 a half inch thick hardwood, with two bottom ledges six inches by three inches; cornerstraps to be six-inch by quarter-inch wrought-iron, bolted through angle of box, carrying straps to pass under ledges on bottom, and carried up sides of box, made of four-inch by five-eighths inch wrought-iron, with eylet-holes thickened to receive box chains, and securely bolted to box with half-inch bolts.

#### Ladders.

All ladders shall be of clean Oregon, with rungs of split hardwood, set in centre of stiles. No batten ladders to be used, other than roof ladders.

All ladders must stand not less than four feet six inches above staging; where the inspector so directs, more than one set of ladders shall be used.

25 All ladders to be effectively lashed and to be stayed where length exceeds twentytwo feet.

Sydney : William Applegate Gullick, Government Printer.-1901.

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