

No. 630,105.

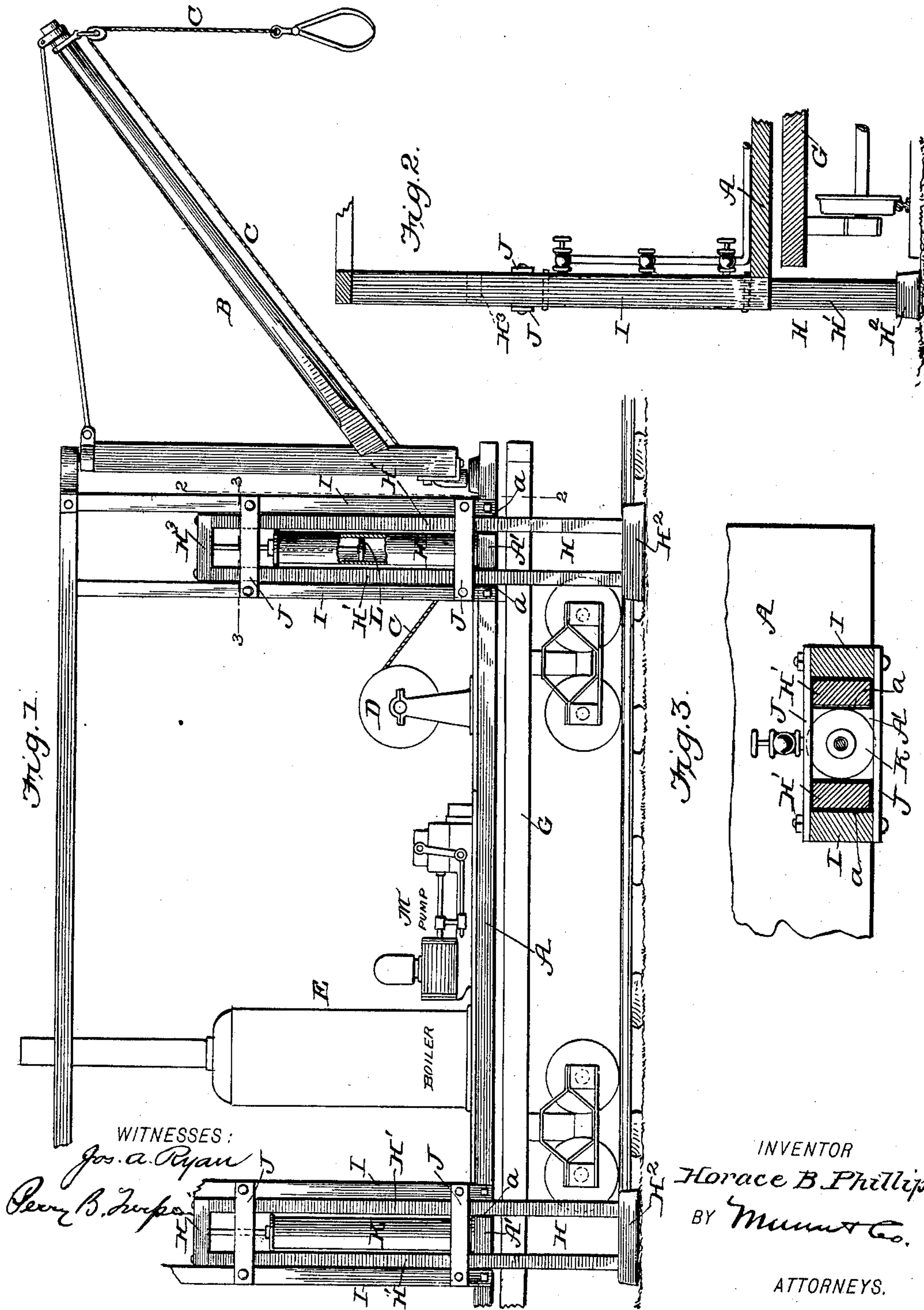
Patented Aug. 1, 1899.

H. B. PHILLIPS.
LOG LOADING APPARATUS.

(Application filed Apr. 11, 1899.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 4.

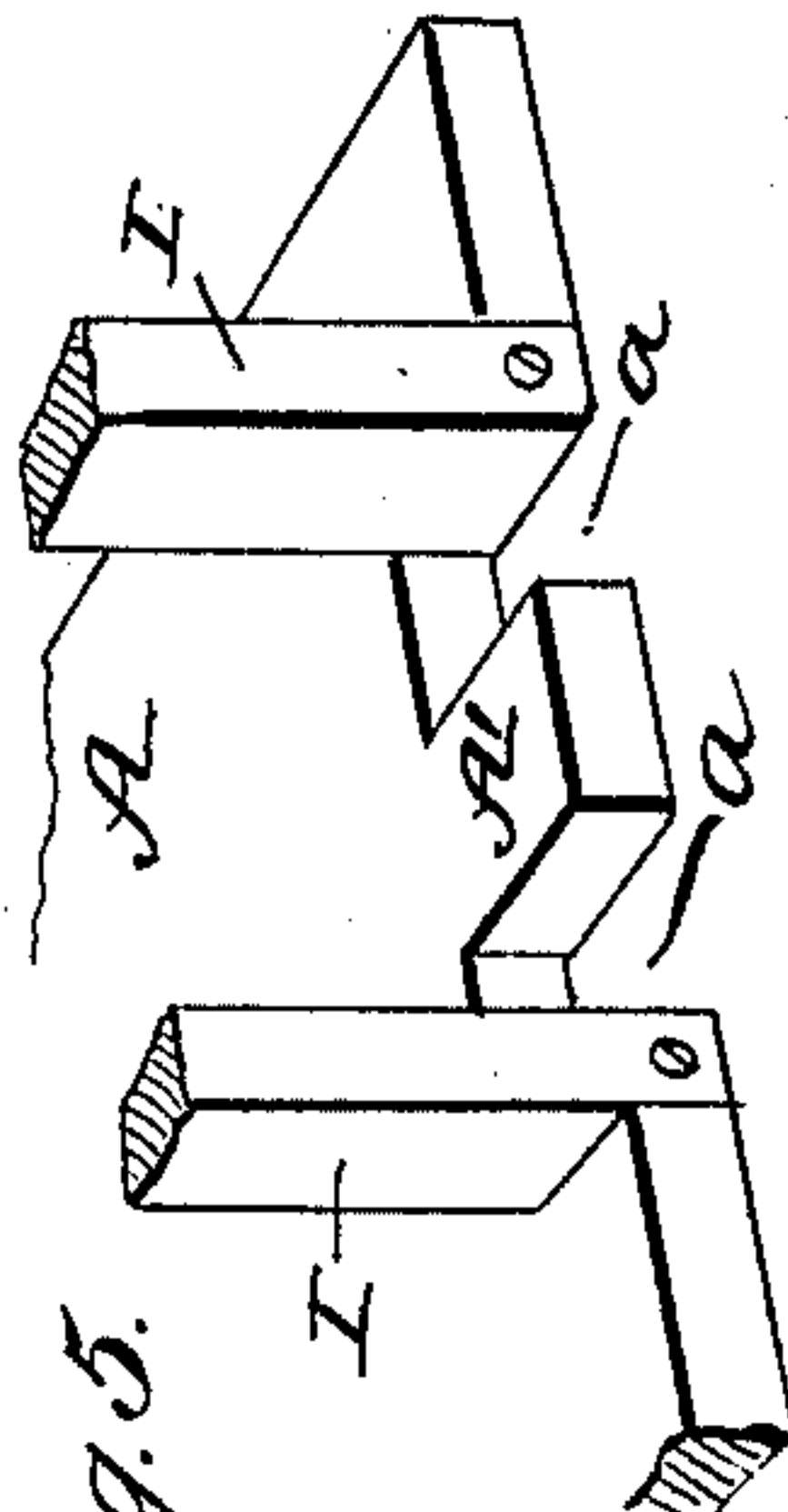
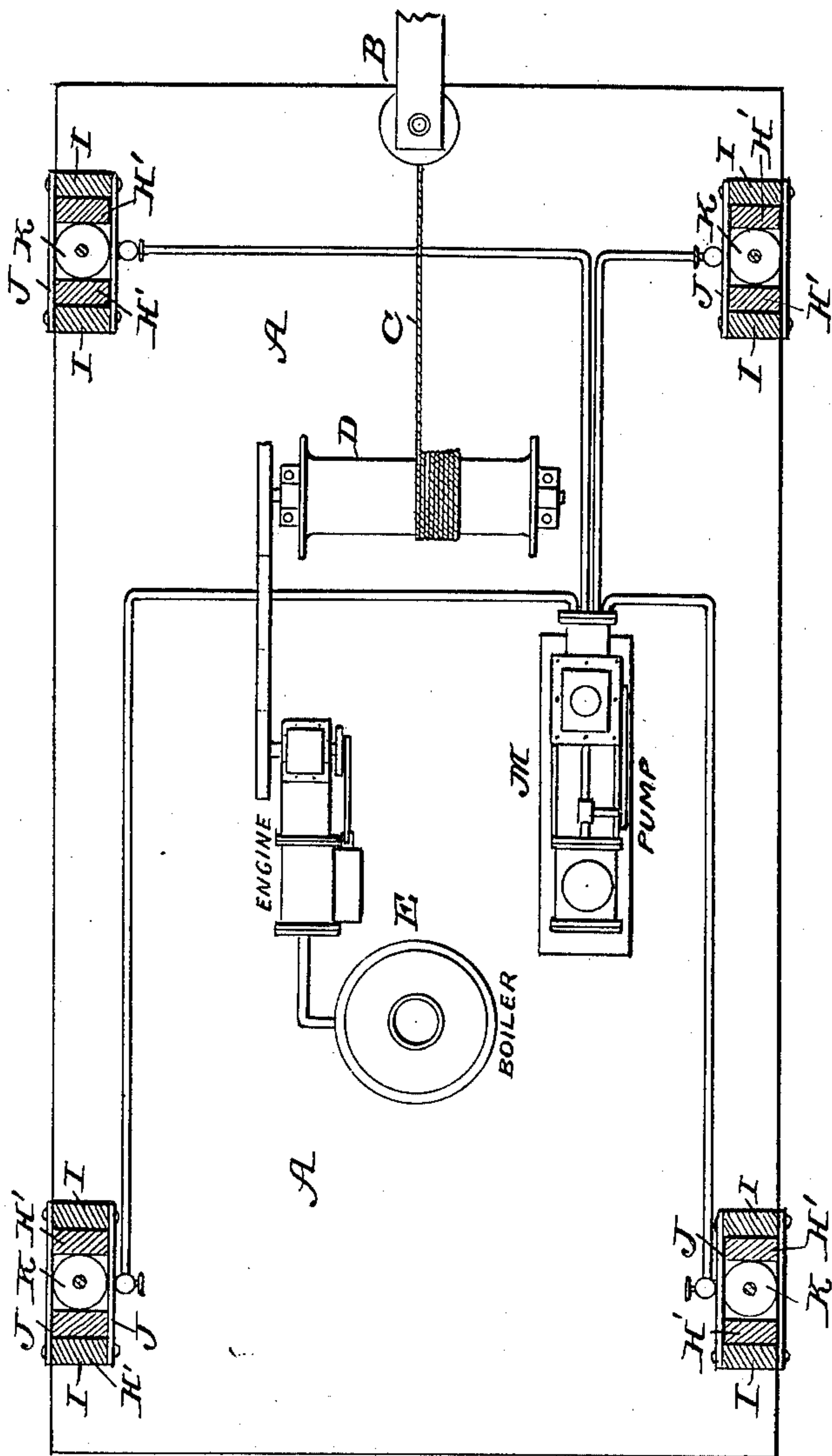


Fig. 5.

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UNITED STATES PATENT OFFICE.

HORACE BURTON PHILLIPS, OF SUFFOLK, VIRGINIA.

LOG-LOADING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 630,105, dated August 1, 1899.

Application filed April 11, 1899. Serial No. 712,599. (No model.)

To all whom it may concern:

Be it known that I, HORACE BURTON PHILLIPS, residing at Suffolk, in the county of Nansemond and State of Virginia, have made certain new and useful Improvements in Log-Loading Apparatus, of which the following is a specification.

My invention is an improvement in apparatus for use in logging operations, and includes means for handling the logs and devices whereby the log-handling means supported on a suitable platform may be adjusted by means of vertically-movable legs on the said platform, so the logging-cars may pass freely under the said platform, or the platform may be lowered onto one of said cars, so it can be transported from point to point as may be desired.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a side view, partly broken away, of my apparatus. Fig. 2 is a detail vertical section on about line 2 2 of Fig. 1. Fig. 3 is a detail cross-sectional view on about line 3 3 of Fig. 1. Fig. 4 is a sectional plan view of the apparatus, and Fig. 5 is a detail perspective view showing portions of the base and guideway uprights.

The platform A is adapted to support the mechanism for handling logs, which may consist, as shown, of a swinging crane B, having a hoisting-rope C, and a stationary engine, including a drum D, for operating the hoisting-rope, a suitable boiler E being provided for generating steam. Manifestly the mechanism for handling the logs may be varied, and I do not desire in the broad features of my invention to be limited to the special construction of such mechanism shown and before described.

The platform A is adapted to rest upon a logging-car G and is provided at its opposite sides with legs H, which are movable vertically alongside the car and may be set to bear upon the surface of the ground in order to support the platform A up above and clear of the car when desired. These legs H possess several main characteristics, among which may be named their independence of movement, so any one leg may be set up or down

independently of the others, and also the arrangement of the said legs to move vertically up and down, so they can be operated to raise the platform A directly up from and lower it upon the bed of a car without giving to such car-bed any motion in one direction or the other, such as might result from the swinging of the platform A down onto the car-bed in any direction of movement except on a vertical line.

In practice the legs may be moved up or down by means of screws or other mechanical powers properly applied; but I prefer to operate the leg by means of fluid-pressure, such as air, steam, or water.

In the special construction shown I provide at the opposite sides of the platform A, near its opposite ends, vertical guideways for the legs, such guideways including the upright beams I, mounted on the platform and spaced apart, the plates J, connecting the uprights I and arranged to inclose the leg and the portion A' of the platform A, which projects between the uprights I and is spaced apart from such uprights at their lower ends and forms the recesses a, in which operate the side bars of the legs. The legs are formed with the side bars H', connected by the foot-piece H² and by the bracket H³ at the top, and these legs operate in the guideways between the uprights I and within the plates J, with the side bars H' moving in the recesses a in the platform A, as shown. By this construction the legs are firmly connected with the platform, are accurately guided in their vertical movements, and form no obstruction when the legs are adjusted up alongside the platform when it is desired to support such platform on a logging-car for the purpose of transporting the platform. The uprights H', being spaced apart, also permit the cylinders K to be located between the uprights H', or, in other words, fairly within the legs, so the power exerted on the piston may operate in a direct line. The pistons L operate in the cylinders K and have their rods extended upward and connected with the bracket H³ at the upper ends of their respective legs. Fluid is admitted to the cylinders, such admission being controlled independently at each cylinder by valves. It is preferred to provide one valve at each end of the cylinder, so the fluid may

be admitted above or below the piston to positively operate the leg either up or down, as may be desired. It will be understood that by positively operating the legs upward they
5 may be drawn out of the mud or bog in which they may sometimes be set in operation. The fluid, which may be air, steam, or water, as before suggested, may be supplied by a suitable pump M or otherwise, as may be desired.
10 By operating each of the legs independently it is obvious the platform may be readily adjusted to a desired level position, with the legs resting on uneven ground or on marshy or other soft ground, in which the legs may
15 sink to different depths.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus substantially as described the platform having guideways composed of uprights spaced apart and a portion of such platform being extended between said uprights, recesses being provided between
20 said extended portion of the platform and the uprights, the plates connecting the opposite
25 sides of the uprights, the legs having side bars

operating between the upright on the platform and the recesses formed in said platform and within the side plates connecting the uprights, the cylinders fitting between the
30 side bars of the legs and attached to the platform, the pistons operating in the cylinders and having their rods connected with the legs, and means for controlling the passage of fluid to said cylinders substantially as set forth.
35

2. In an apparatus substantially as described the combination of the platform, the legs movable up and down thereon, the cylinders arranged within said legs and the pistons operating in said cylinders and arranged
40 to operate the legs substantially as set forth.

3. In an apparatus substantially as described the combination of the platform having at its opposite sides upright guideways comprising upright beams spaced apart and
45 connected substantially as described, the legs operating in said guideways and means for operating said legs substantially as described.

HORACE BURTON PHILLIPS.

Witnesses:

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