(No Model.)

C. GRIFFITH.

HOISTING MACHINE.

No. 491,168. Patented Feb. 7, 1893.

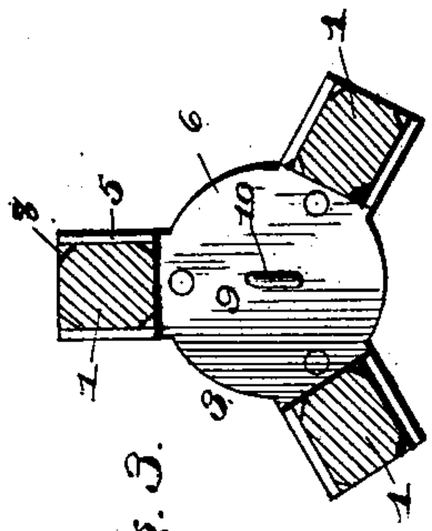
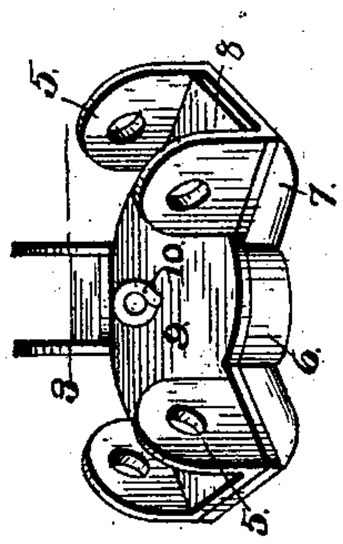


Fig. 3.



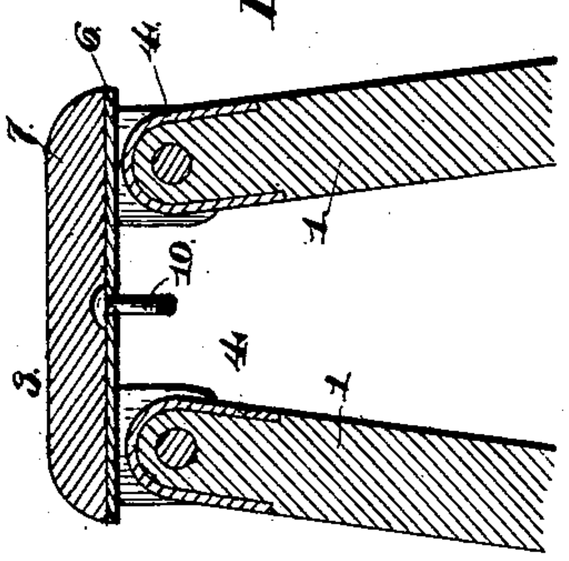


Fig. 2.

Fig. 4.

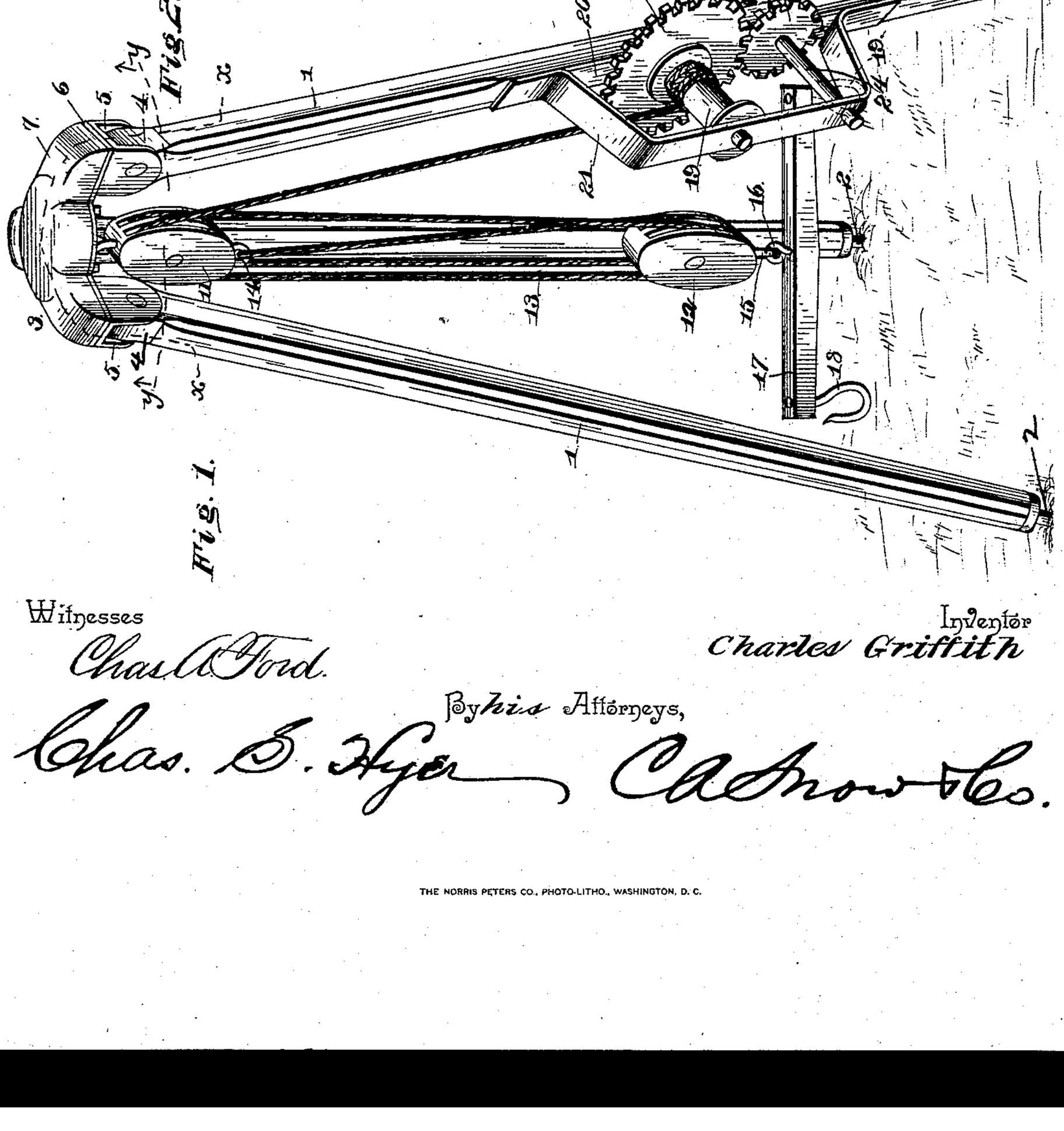


Fig. 1.

Witnesses
Chas. A. Ford.

Inventor
Charles Griffith

By his Attorneys,
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UNITED STATES PATENT OFFICE.

CHARLES GRIFFITH, OF SOUTH WAVERLY, PENNSYLVANIA.

HOISTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 491,163, dated February 7, 1893.

Application filed June 4, 1892. Serial No. 435,508. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GRIFFITH, a citizen of the United States, residing at South Waverly, in the county of Bradford and State of Pennsylvania, have invented a new and useful Hoisting-Machine, of which the following is a specification.

This invention relates to hoisting machines, and consists in the construction and arrangement of the parts thereof as will be more fully herein after described and claimed.

The object of this invention is to provide a device of this character of strong and durable construction, easily handled and set up in position, and adapted to lift heavy weights.

In the drawings—Figure 1 is a perspective view of an improved hoisting machine embodying the features of novelty. Fig. 2 is a transverse vertical section on the line *x—x* of Fig. 1, which is irregularly taken. Fig. 3 is a horizontal section and plan view on the line *y—y*, Fig. 1, looking in the direction of the arrows. Fig. 4 is a detail perspective view of the cap-plate removed from the device, and shown in inverted position.

Referring to the drawings, the numeral 1 designates the legs of the machine, which are provided with points 2 at the lower ends thereof and have their upper ends pivotally secured to a cap-plate 3. The upper ends of the said legs 1 are provided with a wear sheath or covering 4, which prevents abrasion of the upper end of each of the said legs by the parts to which they are connected. The said upper end of each of said legs is pivotally mounted in depending stirrups 5, which are secured to a metallic plate 6, the said metallic plate being provided with a covering 7, the said covering and plate 6 being of integral construction if so desired and formed of cast metal. In like manner the stirrups 5 are also formed of metal and are secured to the said plate 6 in triangular form, so as to arrange the legs 1 after the manner of a tripod. To accommodate this arrangement of the legs, the plate 6 is formed with a series of arms 8 projecting from a central web 9, the said covering 7 also conforming to the contour of the said plate as thus set forth. The web 9 has an eye 10, depending from the central portion thereof to which is secured a block 11, below which is another block 12 through which the rope or cable 13, from the pulley 11 passes and has the end thereof firmly secured to an eye 14, depending from the under side or end of the said block 11. The lower end of the block 12 has a hook 15 secured thereto adapted to be removably engaged by an eye 16, centrally attached to a yoke or arm 17 having hooks 18 at the opposite ends thereof to engage the rope or cable connected to the weight or object to be lifted. The opposite end of the rope or cable 13 is connected to a drum 19, of a windlass which is connected to one of the legs 1. The said drum 19 is mounted on a shaft having its ends bearing in a plate 20, secured to the leg 1 and in a supporting metallic strap 21 which extends over the entire windlass and has its ends connected to said plate 20.

To the drum 19 is attached a large pinion 22, which meshes with a smaller pinion 23, keyed to a shaft 24, which extends through the plate 20 and the leg to which the windlass is attached, and has its projecting end screw-threaded, as at 25, to removably receive a crank-handle 26. The opposite end of the said shaft 24 also has bearing in a metallic strap 21. By operating the windlass, the rope or cable 13 is drawn through the pulleys or blocks 11 and 12 to thereby raise the weight or object which may be attached to the yoke or arm 17 and the strain is brought to bear in the central portion of the plate 6 and equally on the legs 1 when arranged in triangular position, owing to the connection of said legs with said plate; and by having the windlass connected to one of said legs a convenient and useful structure is provided. When not in use the legs 1 may be folded and the device entire stored in compact form.

The many advantages and conveniences arising from a hoisting machine of the construction set forth are readily apparent and easily understood.

Having thus described the invention, what is claimed as new is—

In a hoisting machine, the combination of a cap-plate having arms arranged in triangular form, stirrups secured to the under sides of said arms, legs pivotally connected to said stirrups and having a sheath or covering over the ends thereof, an upper pulley connected to the under side of said cap-plate, a lower

pulley suspended from said upper pulley and having a hook on the under side thereof, a yoke or arm removably connected to the hook of said lower pulley and provided with hooks at the ends thereof, and a windlass secured to one of the said legs, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES GRIFFITH.

Witnesses:

JOSEPH HINES,

LOUIS HOYT.