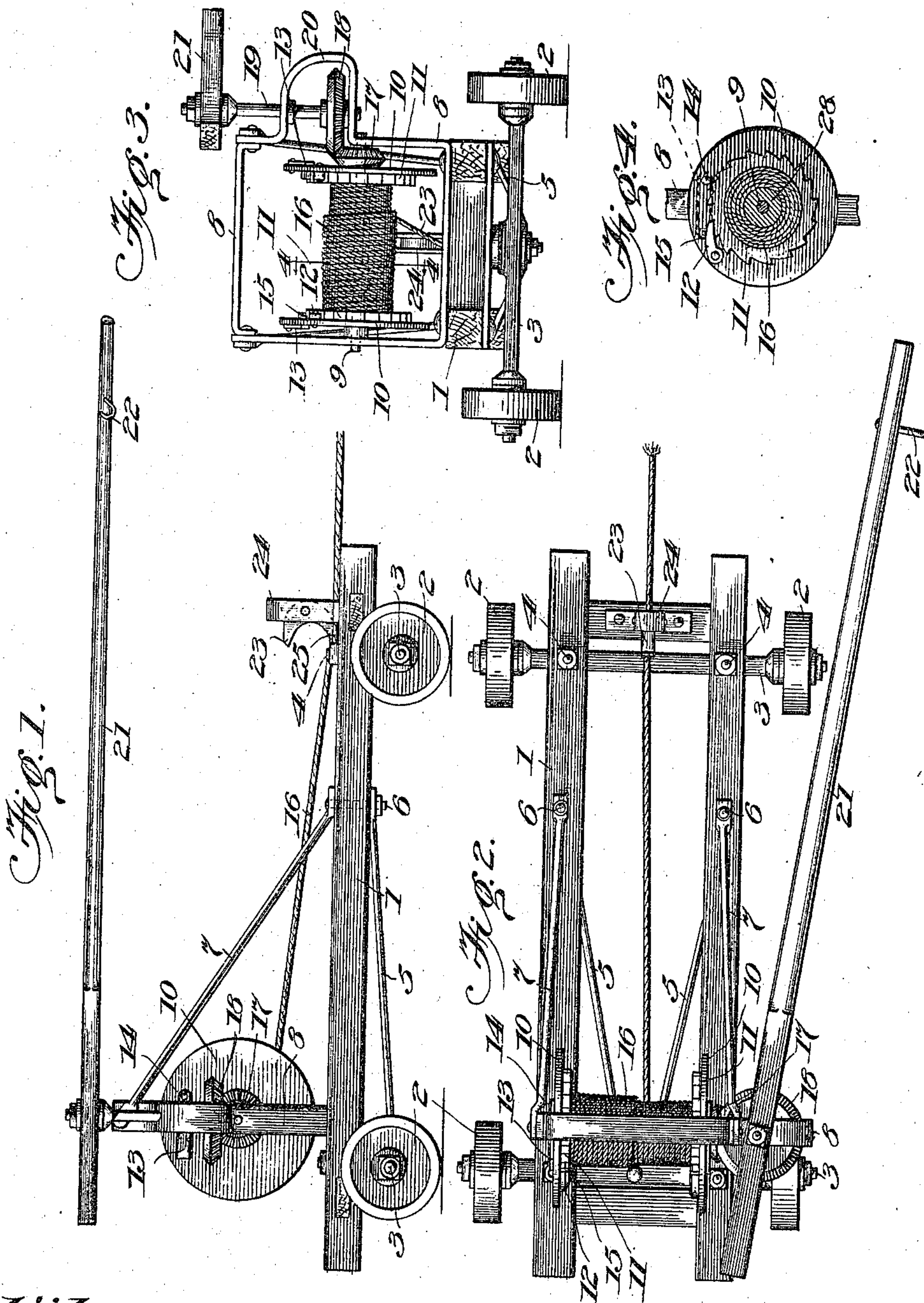


J. W. BROOMHALL.
HORSE POWER.
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Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN W. BROOMHALL, OF PICKENS, MISSISSIPPI.

HORSE-POWER.

963,857.

Specification of Letters Patent. Patented July 12, 1910.

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To all whom it may concern:

Be it known that I, JOHN W. BROOMHALL, a citizen of the United States of America, residing at Pickens, in the county of Holmes and State of Mississippi, have invented new and useful Improvements in Horse-Power, of which the following are specifications.

This invention relates to horse power machines, and one of the principal objects of the same is to simplify machines of this character and to render them more efficient in use.

One object of my invention is the construction of an efficient attachment comprising in itself all the elements of a horsepower machine, which may be readily attached to and detached from any ordinary wagon, truck or platform carrier.

Another object of the invention is to provide means for releasing the rope or cable after it has been wound upon the drum for clamping the cable when required.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which,—

Figure 1 is a side elevation of a horse power made in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a rear end view. Fig. 4 is a sectional view on the line 4—4, Fig. 3, looking in the direction indicated by the arrows therein.

Referring to the drawing for a more specific description of my invention, the numeral 1 designates a frame mounted on wheels 2, the axles 3 of which are secured by means of clips or bolts 4 to said frame. The rear axle has connected to it the diverging bars 5, the front ends of which are secured by means of bolts 6 to the frame 1, said bolts also passing through the ends of inclined braces 7, the upper ends of which are connected to a vertical frame 8. The frame 8 comprises a transverse bottom piece secured to the frame 1 by bolts or in any other suitable way and side uprights, one of the uprights being offset as at 20, to furnish bearings for a vertical shaft 19; the upper ends of the uprights are connected by a cross-bar. Journaled in the frame 8 below the offset 20 is a winding drum comprising a shaft 9 having fixed thereto suitable end disks 10, and at the inner sides of said disks ratchet wheels 11 are secured to a sleeve 28 rotatably mounted on the shaft. Pawls 12

are pivoted to the disks 10 and engage the teeth of the ratchet wheels. Keepers 13 for the pawls 12 are secured at 14 to the disks 10, said keepers each having a pin 15 which extends through the disk and holds the pawl 12 into engagement with the teeth of the ratchet wheel. The pin 15 may be withdrawn to permit the pawl to disengage the teeth. A cable 16 is wound upon the sleeve 28 by means of the pinion 17 fixed to the shaft 9, said pinion being in mesh with a beveled gear wheel 18 mounted upon a vertical shaft 19 journaled in an offset portion 20 of the frame 8. On the upper end of the shaft 19 is removably secured by means of nuts and bolts or otherwise a sweep 21 provided with a draft hook 22 for the connection of a draft animal or animals.

A rope clamp 23 is pivoted in a bracket 24 secured to a cross bar on the frame 1. The clamp 23 has a roughened end 25 which bears against the cable 16 to prevent the same from unwinding from the drum whenever it is required. This clamp has its gripping surface eccentric to a pivot so as to grip the wire or rope under any tendency of the latter to unwind from the drum and is normally held in gripping position by any ordinary spring (not shown) which however may readily yield to permit the cable to be wound up.

It is to be noted that my device is extremely simple in construction so that it may be readily attached to any ordinary wagon-bed or truck or platform vehicle by simply removing the bolts which secure the lower part of frame 8 and braces 7 to the under frame or carrying frame. This is important and constitutes a valuable feature of my invention in that it furnishes a removable device easily adapted to various uses, as in log hauling, loading, scraping, excavating, stump pulling and which may be readily attached by the purchaser to various forms of carriers without the expense of purchasing an entire machine and carrier. The frame work may be made of any suitable material and of varying sizes and strength, according to the work to be performed and the machine may be sold entire or as an attachment to be applied to any ordinary vehicle such as a wagon.

The operation of my invention would seem to need no specific description.

My invention is simple in construction,

strong and durable, is not liable to get out of order and operates efficiently for its purpose.

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

1. A horse power comprising a carrying frame, a vertical frame mounted thereon, a shaft journaled therein, disks on the shaft, pawls connected to the disks, a drum journaled on the shaft, ratchet wheels on the drum, adapted to engage the pawls, pins extending through the disk and engaging the pawls, and driving means for the shaft.

2. In a horsepower machine, a supporting frame, a detachable frame, comprising a transverse bottom piece, uprights, and braces between the frames, a shaft journaled in the uprights, a drum rotatable on the shaft, means for connecting the drum to the shaft, a second shaft mounted in one upright, drive gearing between the shafts, and a sweep connected to the second shaft.

3. In a horse power, a portable frame, a secondary frame mounted thereon comprising a cross-piece and uprights at the ends of the crosspiece, braces between the frames, a lateral offset portion in one upright, a vertical shaft journaled in the offset portion, a horizontal shaft in the uprights, gearing between the shafts, a winding drum on the horizontal shaft, disengageable means for connecting the drum and the shaft, and a sweep connected to the vertical shaft.

4. A horse power attachment comprising in combination a frame consisting of a bottom piece, uprights, a brace between the uprights, one of the uprights having a ☐ shaped bend between its ends, a shaft journaled in the uprights, a drum on the shaft, means for connecting and disconnecting the drum and the shaft, a shaft journaled in the ☐ shaped bend and geared to the first named shaft and means for connecting a sweep to the last named shaft.

5. In a removable power attachment, a frame comprising connected uprights hav-

ing detachable means for securing them to a vehicle, a brace between the uprights, braces connected to the uprights at their upper ends and having detachable securing means at their lower ends, a horizontal winding drum journaled in the uprights, a vertical shaft journaled in one upright, gearing connecting the drum and shaft and means for securing a sweep to the vertical shaft.

6. In a horse power, a vertical frame comprising a bottom bar, integral uprights and a top bar, one of the uprights having an offset ☐ shaped portion, a shaft journaled in the uprights, a winding drum on the shaft, detachable pawl and ratchet means connecting the drum and shaft, a vertical shaft journaled in the offset portion, gearing between the shafts and means for detachably securing a sweep to the vertical shaft.

7. A horse power comprising a movable frame, a secondary upright frame removably secured thereto, said secondary frame comprising transverse upper and lower bars and oppositely disposed uprights, braces removably secured to the uprights and the movable frame, one of the uprights having a lateral offset ☐ shaped portion between its ends, a shaft journaled in the uprights, a drum rotatable on the shaft and having ratchets at its ends, disks fixed on the shafts, pawls on the disks having a detachable engagement with the ratchets, a vertical shaft geared to the first named shaft and journaled in the ☐ shaped portion, a sweep on the vertical shaft, a cable connected to the drum and adapted to be wound thereon by the operation of the sweep and a spring pressed grip on the movable frame adapted to restrain motion of the cable in one direction, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN W. BROOMHALL.

Attest:

JAS. R. WATSON, Jr.,
R. C. LIPSEY.