J. MILLER.

PORTABLE WOODWORKING APPARATUS.

APPLICATION FILED JAN. 30, 1911.

1,012,688.

Patented Dec. 26, 1911.

2 SHEETS—SHEET 1.

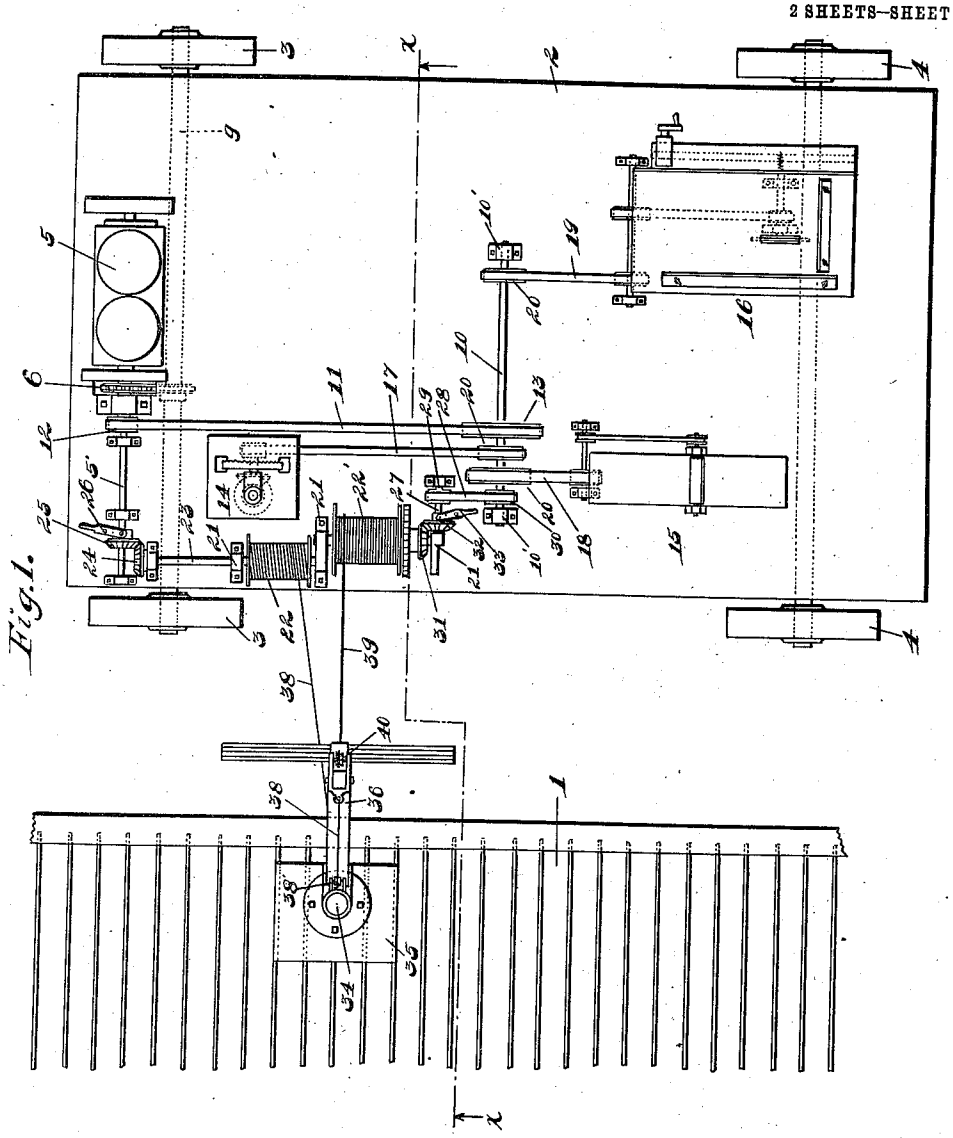

Fig. 1.

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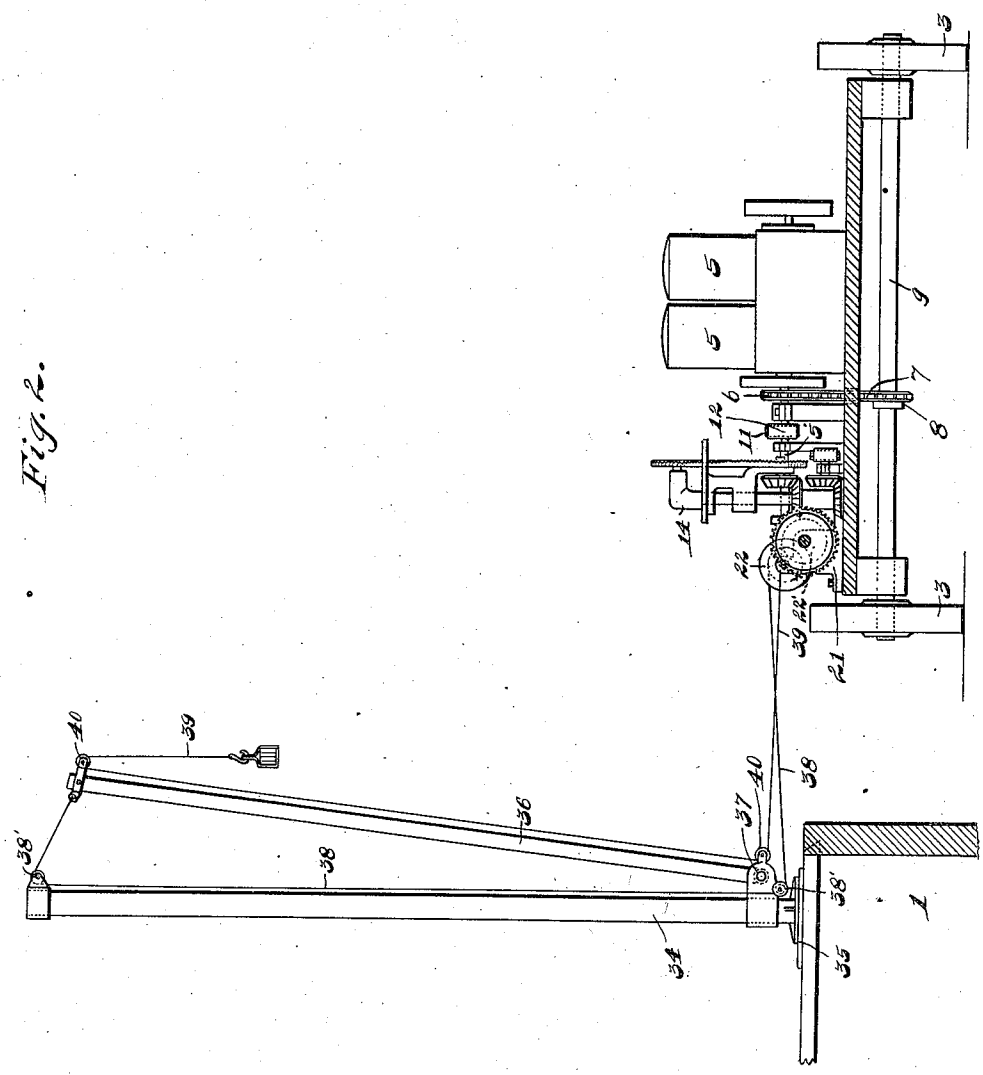
2 SHEETS—SHEET 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN MILLER, OF FREEPORT, ILLINOIS.

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1,012,688. Specification of Letters Patent. Patented Dec. 26, 1911.

Application filed January 30, 1911. Serial No. 605,517.

To all whom it may concern:

Be it known that I, JOHN MILLER, a citizen of the United States, and a resident of the city of Freeport, county of Stephenson, and State of Illinois, have invented certain new and useful Improvements in Portable Woodworking Apparatus, of which the following is a specification.

This invention relates to improvements in wood working machinery and has for its object the provision of portable wood working apparatus adapted to be moved from place to place at will, and which will be adapted for employment in wood construction work, especially in house building, to serve to work the wood material such as to saw, joint, or drill the same properly to the application thereof, by power-driven machinery instead of by hand operated tools such as is now generally the practice; and a further object is to provide means whereby the material may be readily and expeditiously transferred to and from the machinery and building or structure in conjunction with which the apparatus is employed.

A further object is the provision of apparatus of the character mentioned which will be of durable and economical construction and efficient in operation.

Other objects will appear hereinafter.

With these objects in view my invention consists in a portable wood working apparatus characterized as above mentioned and in certain details of construction and arrangements of parts all as will be hereinafter more fully described and particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1 is a top plan view of a building in the course of construction adjacent to which is arranged portable wood working apparatus embodying my invention, the apparatus also included in my invention for transferring and hoisting the material, being shown mounted upon said building in operative position, and Fig. 2 is a transverse section taken on substantially line *x*—*x* of Fig. 1.

Referring now to the drawings 1 indicates a building or other structure in the course of construction, adjacent to which is arranged a platform 2, the latter being mounted upon traction and steering wheels 3 and 4 respectively, whereby said platform may be readily moved from place to place. Mounted upon the platform 2 at the rearward end thereof is a motor 5 of any ordinary or preferred design, a gas, steam or electric motor being each adapted for employment. Upon the power shaft 5′ of the motor 5 is arranged a sprocket wheel 6 which is connected by means of a sprocket chain 7 with a sprocket wheel 8 fixed to the rearward or traction axle 9, an operative connection being thus established between the motor and said axle, so that propulsion of the device when desired, may be effected through the medium of said motor. Arranged substantially central upon the platform 2 is a transversely extending line shaft 10, the latter being rotatably mounted in suitable brackets 10′ secured to said platform. The shaft 10 is operatively connected with the power shaft 5′ through the medium of a belt 11 which passes over pulleys 12 and 13 secured respectively to said shafts 5′ and 10. Suitably mounted and locked upon the platform 2 is a number of wood working machines of approved design and type, a band saw being shown at 14, a jointer or edging machine at 15 and a combined circular saw and drilling machine at 16. The machines 14, 15 and 16 are operatively connected with the line shaft 10 through the medium of belts 17, 18 and 19 respectively, said belts passing over pulley 20 spaced upon said line shaft.

Secured upon the platform 2 adjacent one edge thereof are bearing brackets 21, in which are mounted reels 22 and 22′. The shaft 23 of the reel 22 is operatively connected with the power shaft 5′ through the medium of meshing bevel gears 24 and 25, which are carried respectively by said shafts 23 and 5′. The gear 25, however, is splined to the shaft 5′ so that the same through the medium of a shifting fork 26 may be slid upon the shaft 5′ into and out of engagement with the gear 24 in order to effect connection or disconnection of the reel 22 with said power shaft. The reel 22′ is operatively connected with the line shaft 10 through the medium of a counter shaft 27, the latter being operatively connected with said line shaft through the medium of a belt 28 which passes around pulleys 29 and 30 carried, respectively, by the shafts 27 and 10.

Operative connection between the shaft 27

and the shaft of the reel 22′ is effected through the medium of meshing bevel gears 31 and 32 carried respectively by said reel shaft and said shaft 27. The gear 32, however, is splined to the shaft 27 to permit of sliding thereof upon said shaft by means of a shifting fork 33, this provision affording means whereby said gear 32 may be thrown into or out of mesh with the gear 31 in order to effect the connection or disconnection of the reel 22′ with the power and means, that is, the motor.

Arranged upon the structure or building 1 is a derrick of the conventional type, consisting of the upright post or stem 34 the base 35 of which is temporarily secured to said structure 1. The lower end of the boom 36 of the derrick is pivoted at 37 adjacent the base 35 of the post 34, angular adjustment of said boom being effected through the medi-um of the halyard 38 which passes around guide pulleys 38′, one end of said halyard being secured to the outer end of said boom, the opposite end thereof being secured to and coiled about the reel 22. The arrangement is such, as will be observed, that adjustment of said boom may be effected by rotation of said reel, rotation of said reel being effected through connection with the motor 5 as above described. The hoisting cable 39 of the derrick passes over guide pulleys 40 carried by said boom, the lower end thereof being secured to and coiled about the reel 22′ so that hoisting of material secured to the free end of said cable may be effected through the medium of the motor 5, since the latter is operatively connected as above described, with the reel 22′. The boom 36 is of such a length and the platform 2 is so positioned relative to the derrick and the structure 1, that said derrick will be adapted to be employed in transferring material from one machine to another arranged upon the platform 2 or from said machine or platform to the building or structure 1 for installing or applying the same.

With an apparatus of this construction, then, it will be seen that tedious and oftimes unsatisfactory manual working of the wood, as sawing or drilling the same preparatory to the application thereof, may be effected in an expeditious, economical and more satisfactory manner through the employment of power driven machines. Further, with the construction as set forth, the transferring or hauling of the material or lumber into the building or structure is obviated, this being done in a more expeditious and satisfactory manner through the employment of the derrick as arranged and connected.

It is understood that no claim is here made to the specific constructions of the individual machines mounted upon the platform 2 and that wood working machines of any construction desired and others than those shown may be employed if desired.

While I have illustrated and described the preferred construction for carrying my invention into effect this may be varied somewhat without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction as set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

In an apparatus of the class described, the combination of a platform; front and rear axles for said platform; wheels on said axles; a motor mounted on the rear of said platform above said rear axle, the power shaft of said motor being arranged parallel with said rear axle; an operative connection between said power shaft and said rear axle; a line shaft arranged on said platform parallel with said power shaft; wood working machinery arranged on said platform and connected to be driven by said line shaft; an operative connection between said line and power shafts; reels arranged at one side of said platform with their axes perpendicular to said line and power shafts; a clutch connection between one of said reels and said power shaft; a clutch connection between the other of said reels and said line shaft; a portable derrick; and cables wound on said reels and arranged to operate said derrick, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN MILLER.

Witnesses:
ALLEN JANSSEN,
CLARENCE F. MOERSCH.