(No Model.)

J. DE GRAFF.

SAWING MACHINE.

No. 413,391. Patented Oct. 22, 1889.

Fig 1

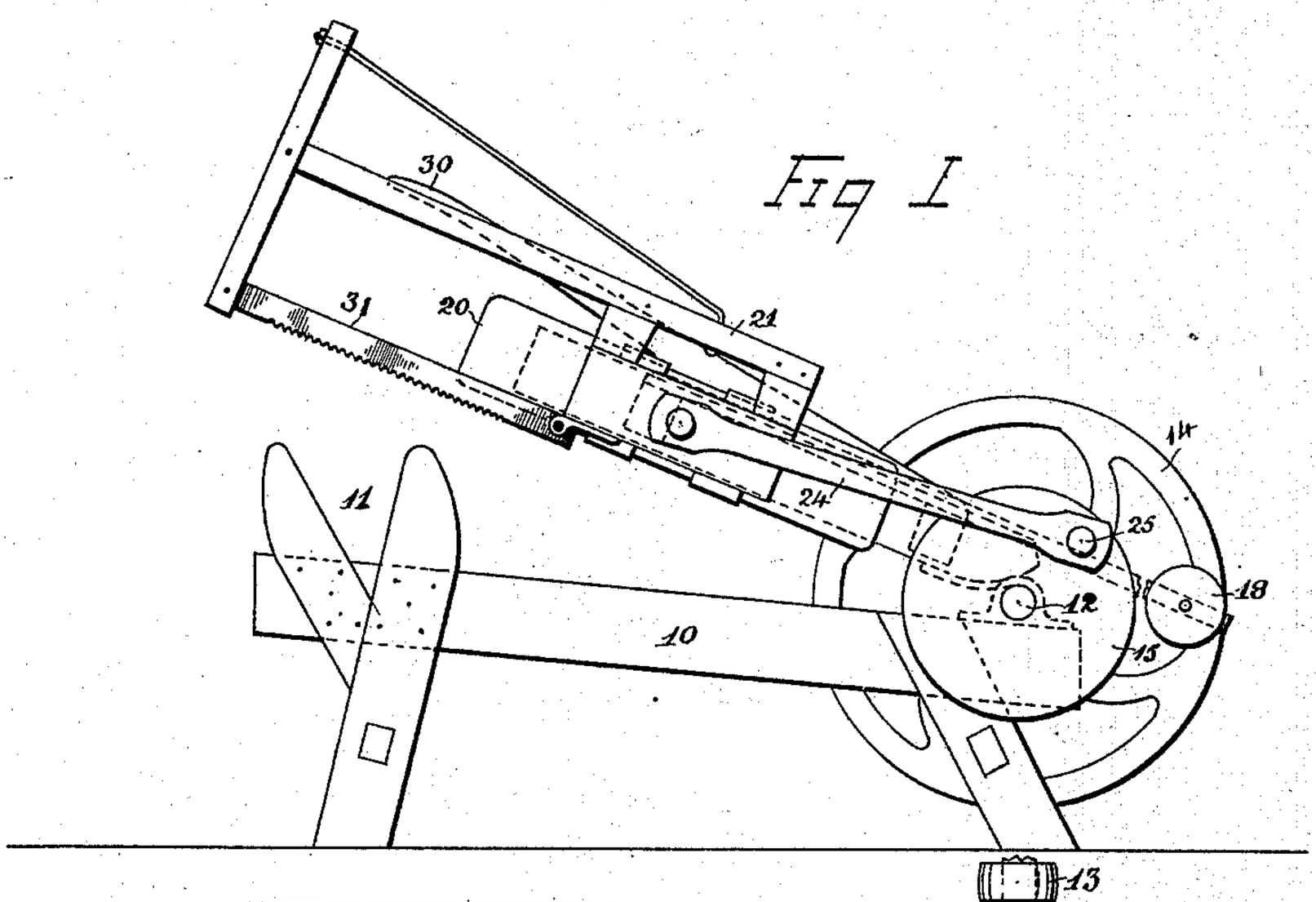
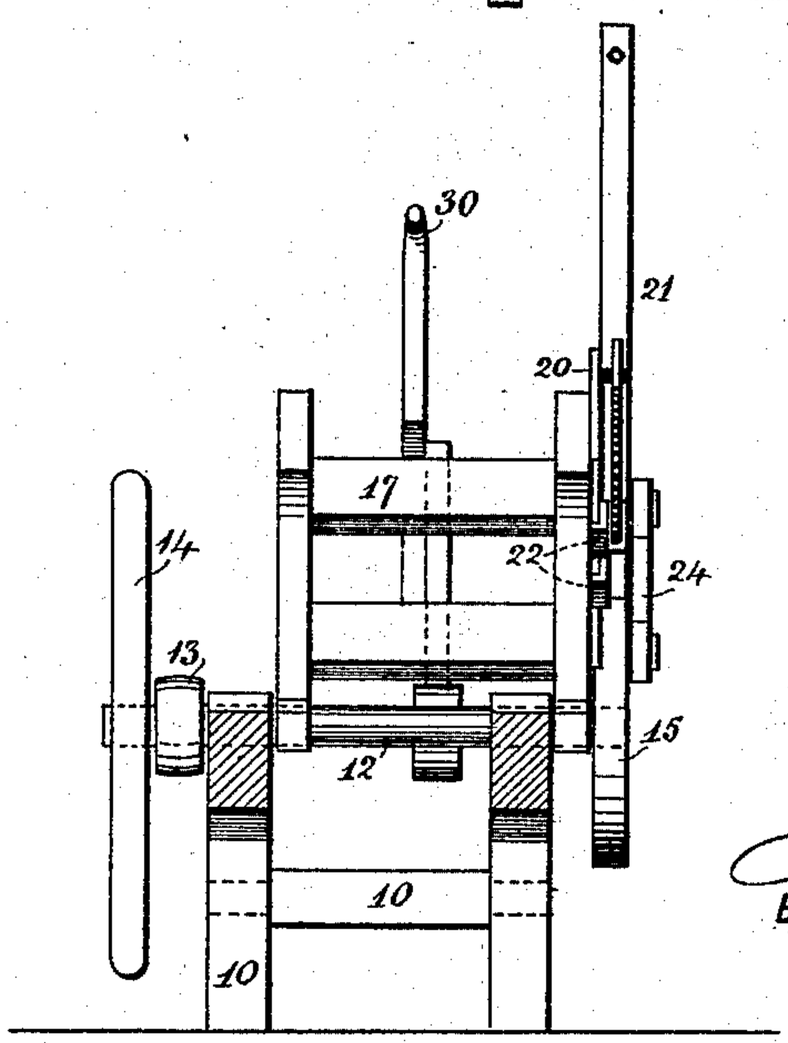


Fig 2

Fig 3



WITNESSES:

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JOHN DE GRAFF, OF DUNKERTON, ASSIGNOR TO F. H. PAGE, OF KEY, IOWA.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 413,391, dated October 22, 1889.

Application filed April 12, 1889. Serial No. 306,976. (No model.)

To all whom it may concern:

Be it known that I, JOHN DE GRAFF, of Dunkerton, in the county of Black Hawk and State of Iowa, have invented a new and Improved Sawing-Machine, of which the following is a full, clear, and exact description.

This invention is an improvement in the class of portable crosscut-sawing machines in which the saw is reciprocated in a horizontal or slightly-inclined plane by means of a crank-shaft operated by hand or by power.

My improvement consists in the construction and arrangement of parts, as hereinafter described, whereby the operator who stands in front of the buck (or support upon which the wood is placed to be sawed) may manipulate the saw—that is to say, raise and lower it and keep it in contact with the wood until the latter is divided.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side view of my improved sawing-machine. Fig. 2 is a plan view thereof; and Fig. 3 is a face view, the main frame, however, being shown in section.

In the drawings, 10 represents the main frame, at one end of which there is provided a buck 11. At the other end of the frame 10, I mount a shaft 12, which carries a pulley 13, a balance-wheel 14, and a crank-wheel 15. Upon the shaft 12, I mount a frame 17, which is normally upheld, as shown in the drawings, through the medium of a weight 18, that is supported by a rearwardly-extending arm 19, said arm being rigidly connected to the frame 17, or in place of the counterbalancing-weight I might arrange a spring between the frames 10 and 17.

To one side of the frame 17, I secure a metallic plate 20, which serves as a way for a saw-frame 21, said saw-frame being provided with brackets 22, that are recessed to receive the edges of the plate 20. At a point near the rear end of the saw-frame 21, I connect a pitman 24, the other end of the pitman being connected to a wrist-pin 25, carried by the crank-wheel 15. In order that the frame 17 may be lowered when desired, I provide it with a forwardly-extending handle 30.

The shaft 12 is operated by any suitable power.

In practice the operator stands in front of the buck 11, and, having placed thereon a stick of wood to be sawed, he grasps the free end of handle 30 and pulls the frame 17 and its attachments down, and continues to press down on said handle until the saw 31 severs a portion of the stick. Then he raises the saw-carrying frame (or allows it to rise) and repeats the operation on the same stick or another.

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

The combination, with the buck and driving-shaft 12 and the crank-wheel 15, of the vertically-swinging counterbalanced frame 17, mounted loosely on said shaft, the guide-plate 20, attached to one side of said frame, the saw-carrying frame 21, operated by a pitman and sliding on the guide-plate, and the handle 30, which is rigidly attached to the frame 17 and projects forward parallel to the saw-frame, so that it may be conveniently grasped by the operator standing in front of the buck, and the saw-carrying frame depressed and raised, as required.

JOHN DE GRAFF.

Witnesses:
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