HENRY P. OHM.

Improvement in Sawing-Machines.

No. 115,092. Patented May 23, 1871.

Fig. 1.

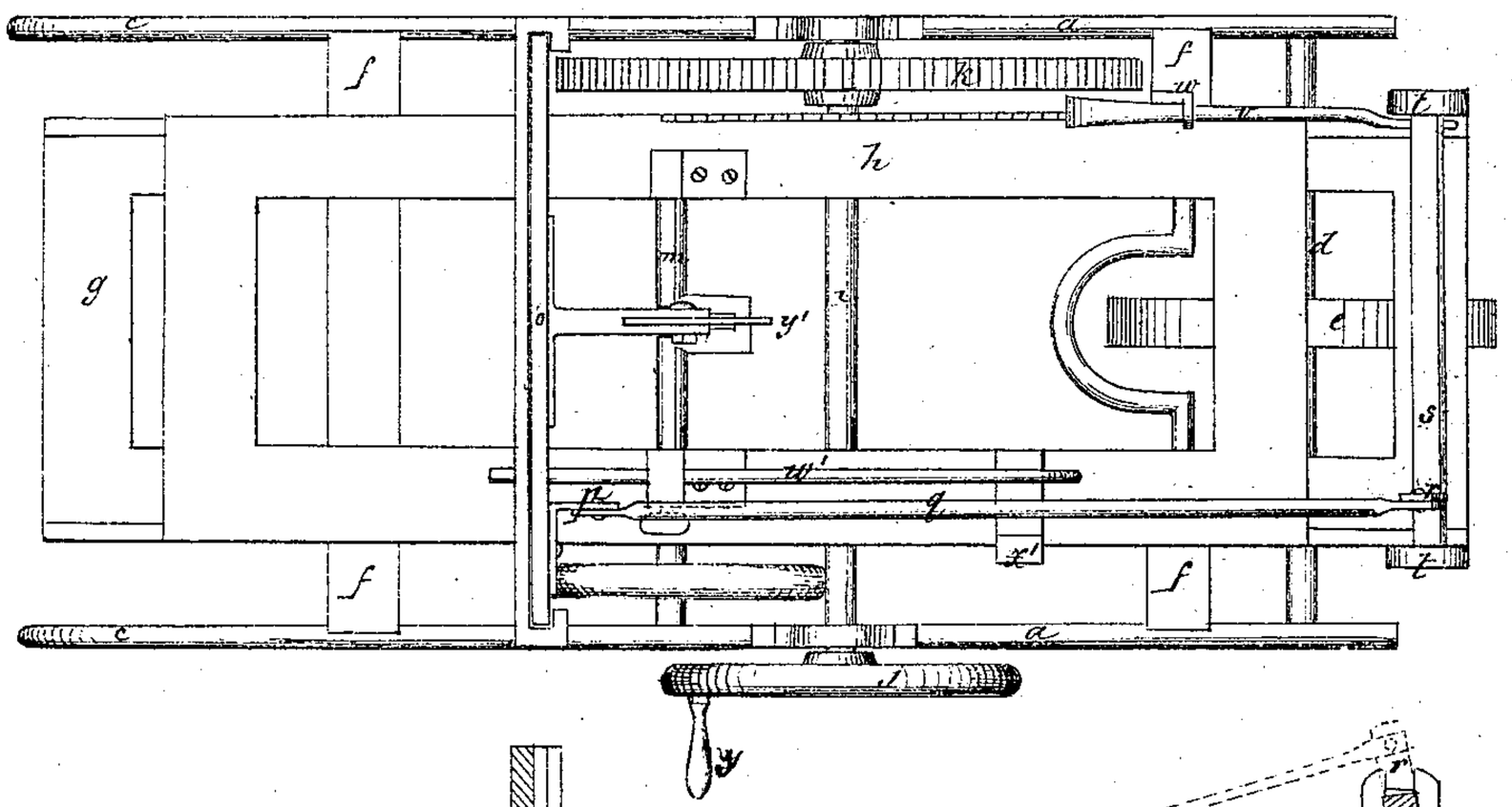
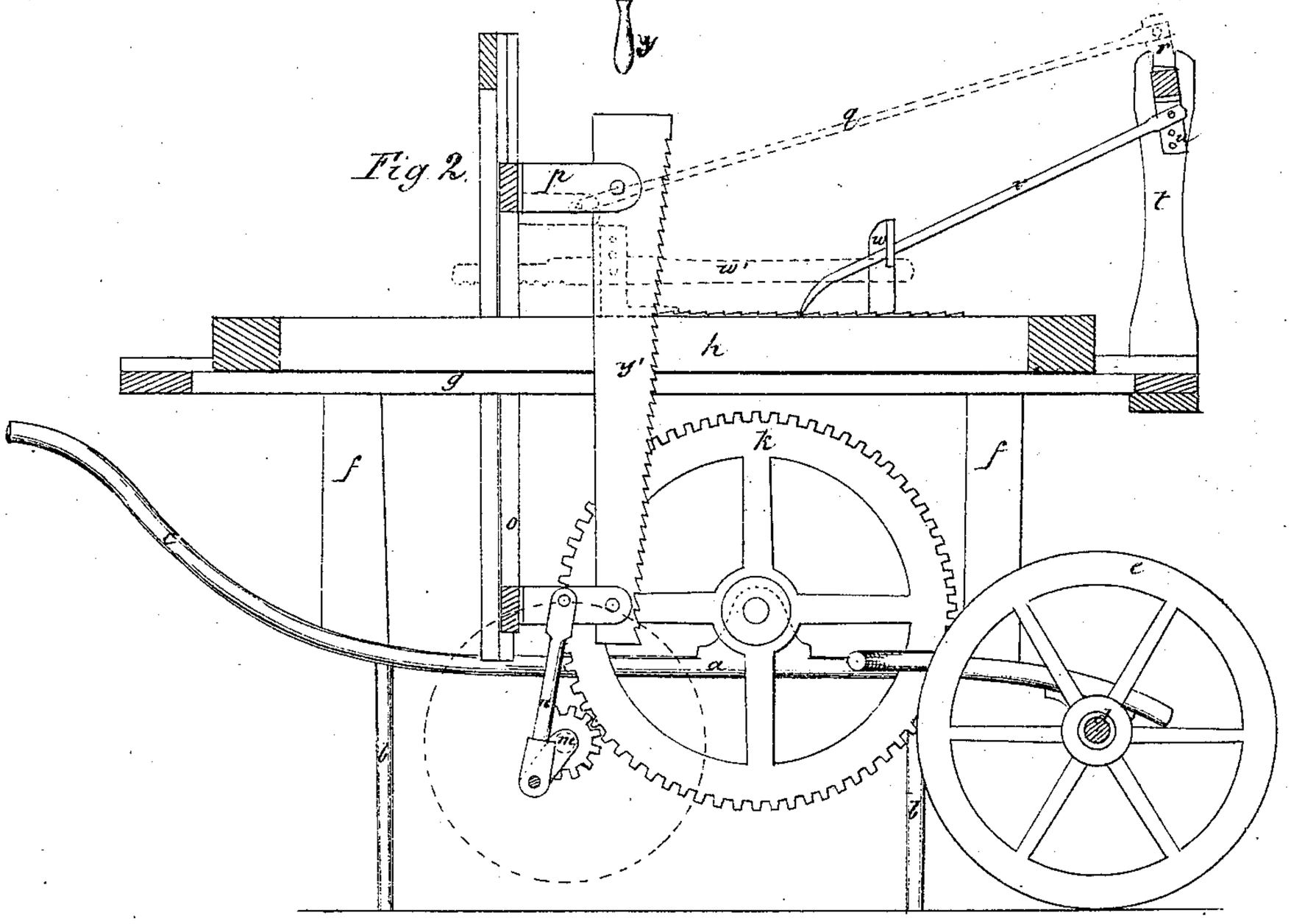


Fig. 2.



Witnesses:

H. J. Arctz

Thos. D. D. Durand.

Inventor:

Henry P. Ohm.

PER Munn & Co

Attorneys.

115,092

UNITED STATES PATENT OFFICE.

HENRY P. OHM, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 115,092, dated May 23, 1871.

To all whom it may concern:

Be it known that I, HENRY P. OHM, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Sawing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a top view, and Fig. 2 is a side elevation.

This invention relates to a portable sawing-machine for the use of farmers, mechanics, and all persons to whom the sawing of wood in any way is an object; the invention consisting principally in the mechanism whereby the feeding of the carriage that supports the wood to be sawn is effected from the same shaft that operates the saw.

Referring to the drawing, *a a* are two parallel bars, which are connected by cross-bars and form the supporting-frame of the machine, said bars being provided with legs *b* and with handles *c* at their rear ends, and being connected at their front ends by an axle, *d*, which bears a wheel, *e*, that forms, with the supporting-frame, a wheel-barrow, on which the rest of the apparatus can be transported from place to place. On four standards, *f*, which rise two from each bar *a*, is supported a grooved frame, *g*, in which plays the carriage *h*. As shaft *i*, mounted crosswise of the bars *a*, bears a fly-wheel, *j*, and a spur-gear, *k*, the latter engages with a pinion, *l*, on a shaft, *m*. A crank on the shaft *m* is connected by a pitman, *n*, with the lower end of the reciprocating saw-frame *o*. Arm *p*, extending horizontally from the upper cross-piece of the saw-frame, is connected by a rod, *q*, with the upper end of an arm, *r*, that projects upward from a rock-shaft, *s*, which is supported in standards *t t* that spring from the frame *g*. An arm, *u*, extending downward from the rock-shaft *s*, has pivoted to it one end of a pawl, *v*, that passes through a slotted standard, *w*, that rises from one side of the frame *g*. The pawl *v* engages with a rack, *w*, attached to one side of the carriage *h*. The rock-shaft *s* is vibrated by the saw-frame, and by its vibrations it operates the pawl *v*, and thus causes the carriage to feed forward. The carriage is slid back by hand after raising the pawl. A lever, *w'*, is passed through a slotted standard, *x*, that rises from one side of the carriage, said standard having a series of holes to the end that the lever may be pivoted at different heights. The lever has teeth near its front end to hold the piece of wood, and it is clamped on the wood by a block, *x'*, placed between the rear end of the lever and the carriage *g*. The block *x'* is provided with shoulders of different heights, which adapt it to the clamping of pieces of wood of varying sizes.

The machine is intended to be driven by hand-power applied to the crank *y*.

The saw *y'* has a cutting-edge inclined backward from top to bottom. The saw will not work when its cutting-edge is either vertical or too much inclined. It order to work to the best advantage the cutting-edge must be just enough inclined, as shown in the drawing.

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

The combination of the reciprocating saw-frame, rock-shaft *s*, connecting-rod *q*, pawl *v*, and carriage *h*, carrying the standard *x*, lever *w*, and block *x'*, as specified.

H. P. OHM.

Witnesses:

SOLON C. KEMON,

CHAS. A. PETTIT.