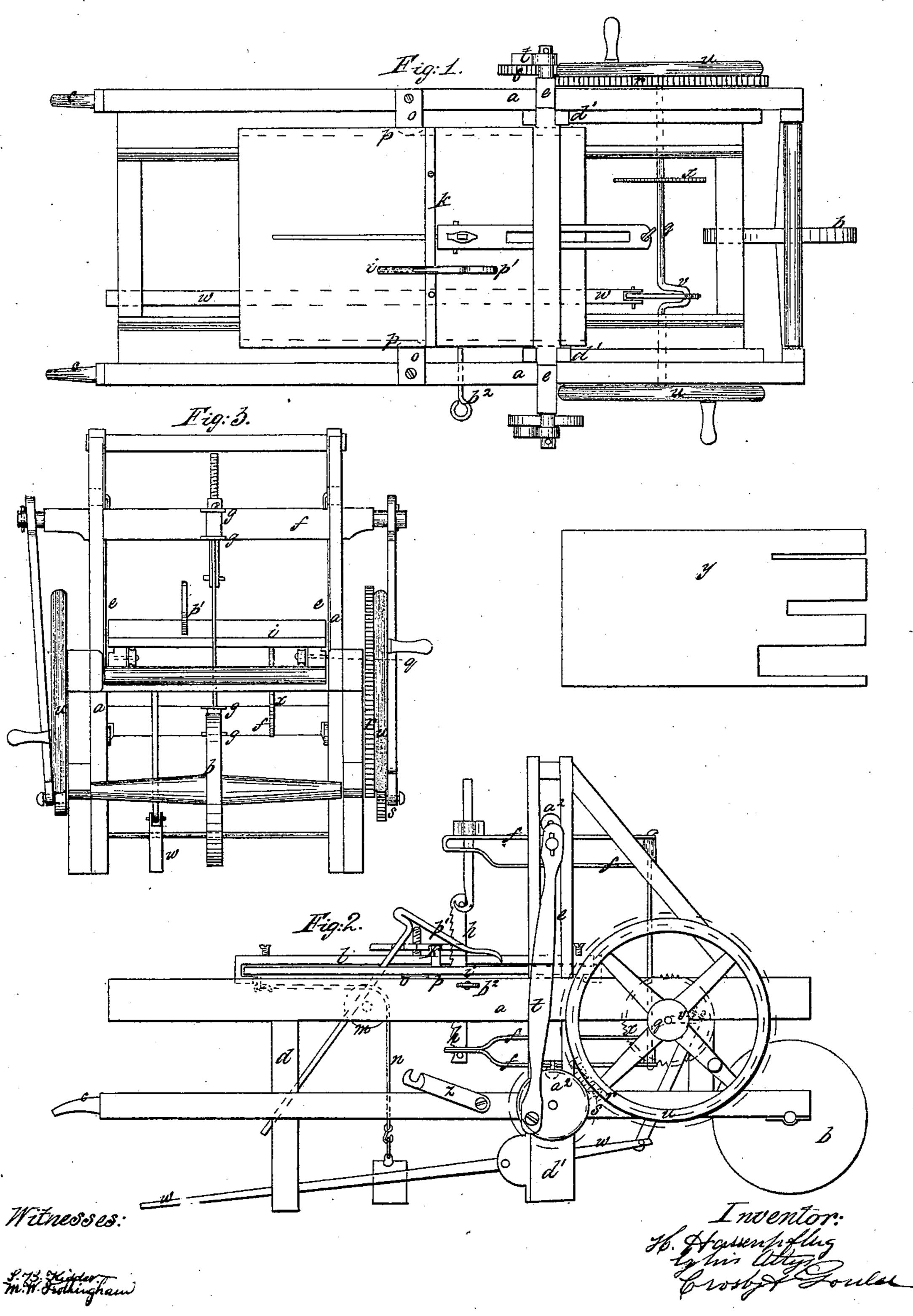
H. Hassennflug, Reciprocating Sam-Mill. N° 60,510. Patented Dec.18,1866.



## Anited States Patent Pffice.

## IMPROVEMENT IN SAWING MACHINES.

## HENRY HASSENPFLUG, OF HUNTINGTON, PENNSYLVANIA.

Letters Patent No. 60,510, dated December 18, 1866.

The Schedule referred to in these Letters Patent and making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, Henry Hassenpflug, of Huntington, in the county of Huntington, and State of Pennsylvania, have invented an improved Sawing Machine; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

The drawings represent a mechanism embodying my invention.

a denotes a strong frame, one end of which is provided with one or more wheels, b, and the other with handles, c, or shafts, so that while the carriage may be propelled like a barrow, it will stand firmly in position when at rest by means of the posts, d d'. The posts or standards, d', have ways or guides, in which slides a vertical reciprocating saw frame, e, to the cross-bars, f, of which slotted arms g are clamped a jig or long saw, h, being strained between the two arms, as seen in fig. 2. The saw works through a horizontal sliding bed or carriage, i, provided with a transverse rest, k, against which the log is supported, if to be cut crosswise, or a longitudinal rest or guide, I, against which it is held if to be slit lengthwise. Beneath this carriage is a loose shaft carrying a grooved pulley, m, over which a cord or chain, n, runs, one end of this cord being attached to the carriage, and the other end having a weight suspended from it, the feed of the log to the saw being produced by the action of this weight, as will be readily understood. The carriage slides upon ways on the frame, a, and is kept from vertical movement by plates, o, fastened to the frame and projecting into grooves, p, in the opposite sides of the carriage. A sliding dog, p', serves to clamp the log to the surface of the carriage and against the rest piece, k, as will be readily understood. Motion is communicated to the saw frame from the driving shaft, q, by a gear, r, and pinion, s, one end of the saw frame being jointed to the pinion by a connecting rod, t, and the other end similarly connected to a crank wheel upon the opposite end of the pinion shaft. The driving shaft is provided at each end with a hand-crank wheel, u, so that the saw frame may be driven by hand power at each side of the machine. The shaft also carries a crank, v, to which a treadle, w, is connected, said treadle lever extending under the frame, a, so that the operator who places the wood in position may also aid in driving the saw. The driving shaft also carries a circular saw, x, which, by application of the bed piece, y, may be employed for sawing light stuff, either while the other saw is operating or when said long saw is at rest. To disconnect the saw frame, e, from the driving shaft, the pinion shaft is made capable of sliding in its bearings sufficiently to carry the pinion into or out of connection with the driving gear, r, a swinging block, z, serving to keep the pinion and gear in connection when the saw frame is to be driven, and a similar block upon the opposite side of the frame serving to keep the pinion and gear out of connection when the circular saw alone is to be driven. The two slotted arms between which the saw is strained are each provided with screws and nuts, by means of which the saw may be set at any required distance in front of the saw frame, in accordance with the general size of the stuff to be sawed or the direction of cut. Friction rolls, a2, are mounted on and beneath the saw frame to run in contact with the opposite sides of the groove or ways in which the saw frame reciprocates, to prevent contact and friction of the frame with the ways. A stop pin, b2, serves to hold the carriage, i, at rest when necessary, as will be readily understood. It will be obvious that the mechanism may be driven by steam or horse power, but the machine is intended principally for a portable wood-sawing apparatus, to be wheeled about and operated by hand.

I claim the arrangement of the slotted arms, with respect to the saw frame, in such manner that the saw may be set at any required distance in advance of the frame, substantially as set forth.

H. HASSENPFLUG.

Witnesses:

J. B. CROSBY,

F. Gould.