

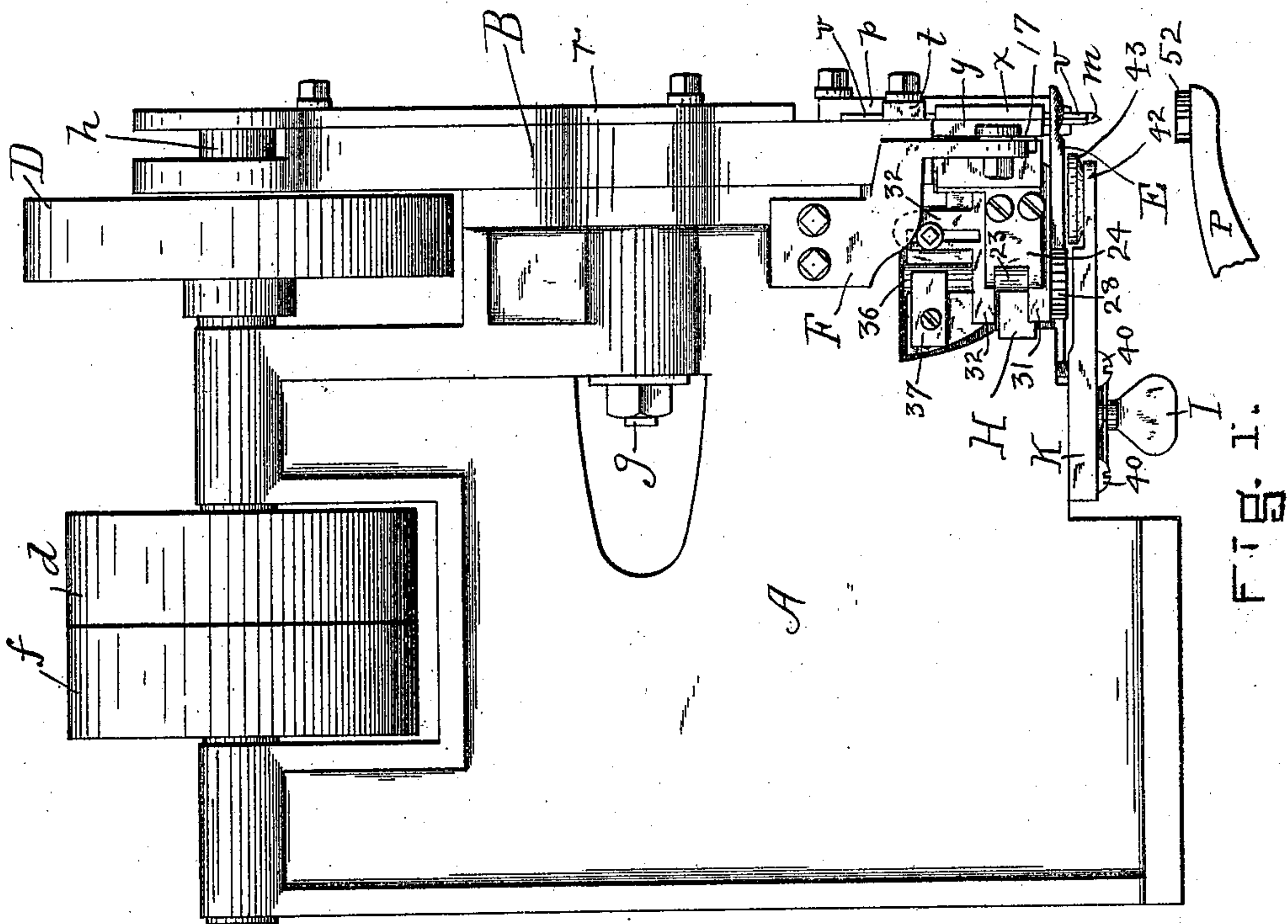
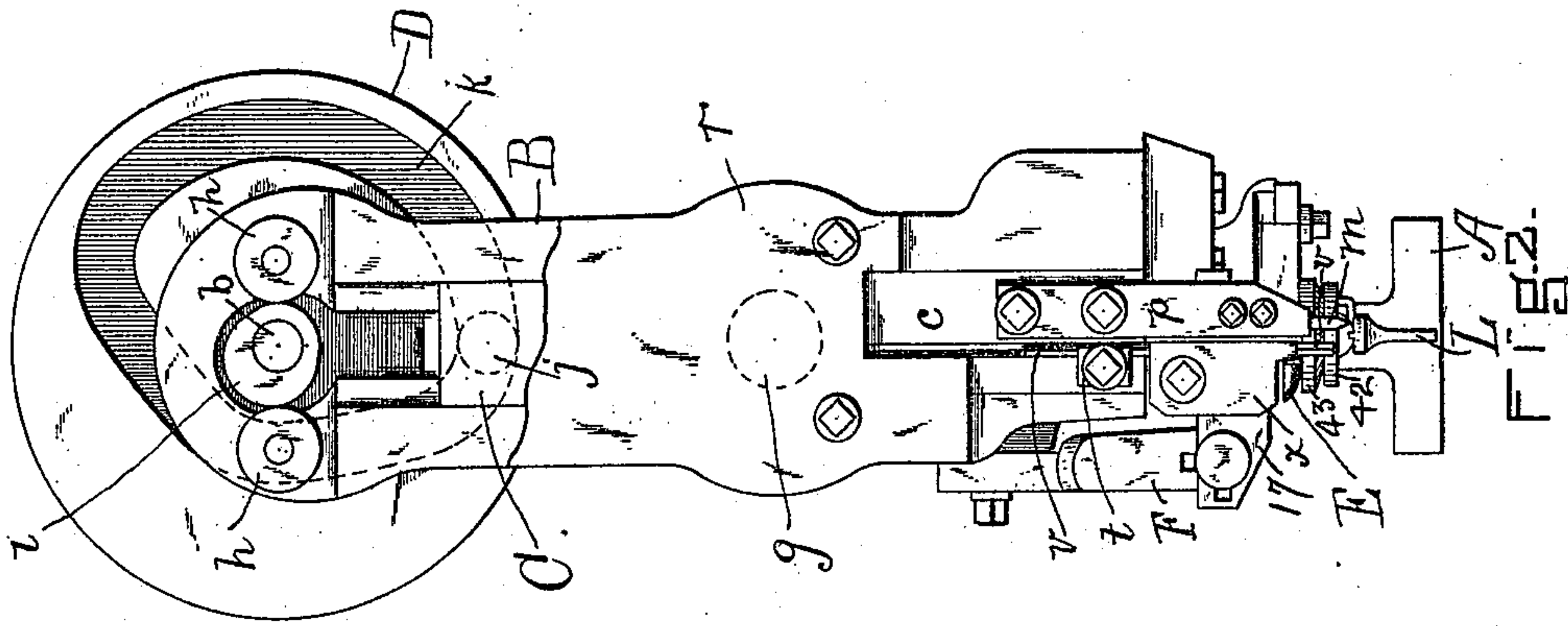
(No Model.)

3 Sheets—Sheet 1.

J. F. DAVEY.  
PEGGING MACHINE.

No. 504,311.

Patented Aug. 29, 1893.



WITNESSES

T. H. McHenry  
Harry Meade.

INVENTOR

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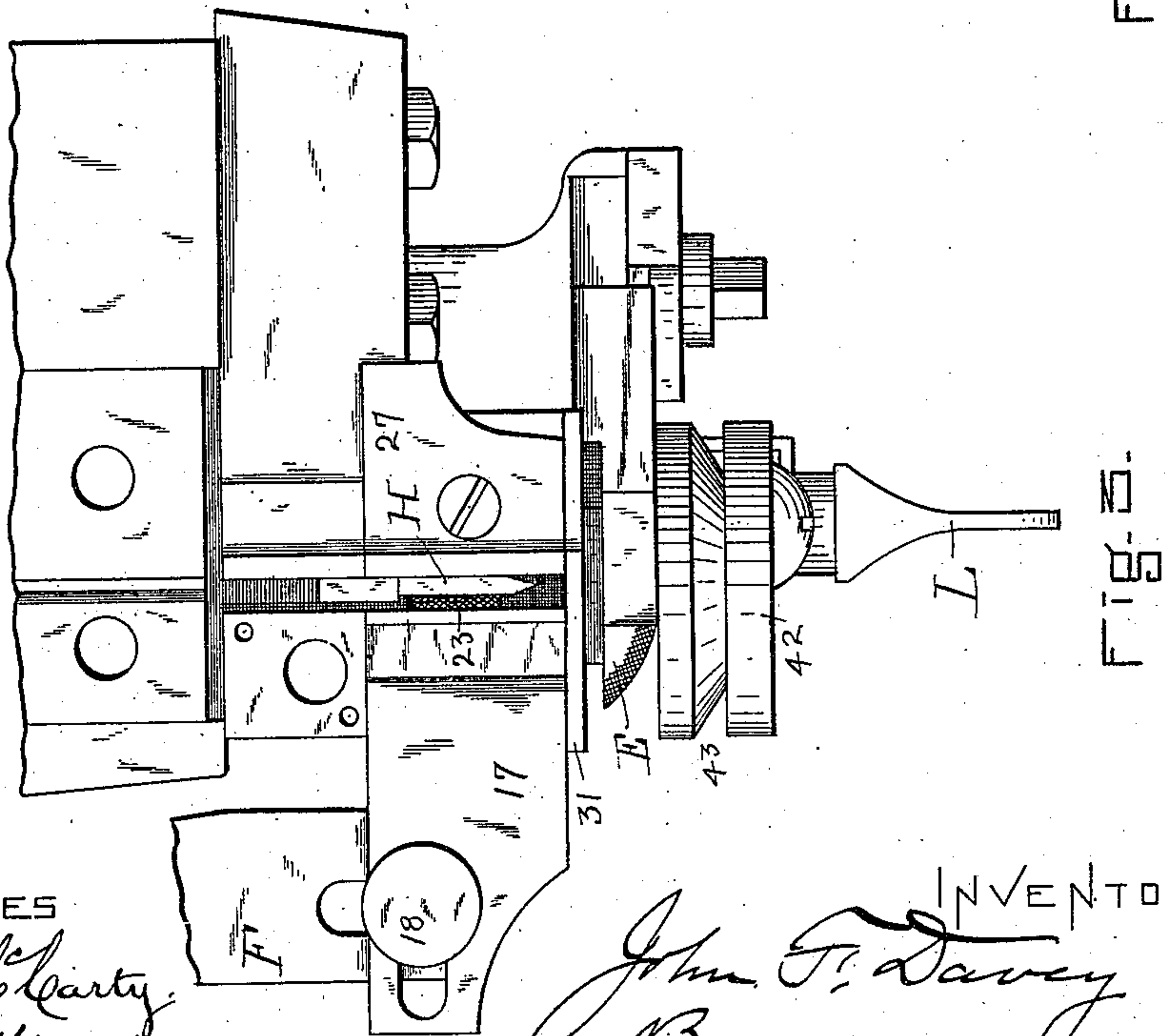
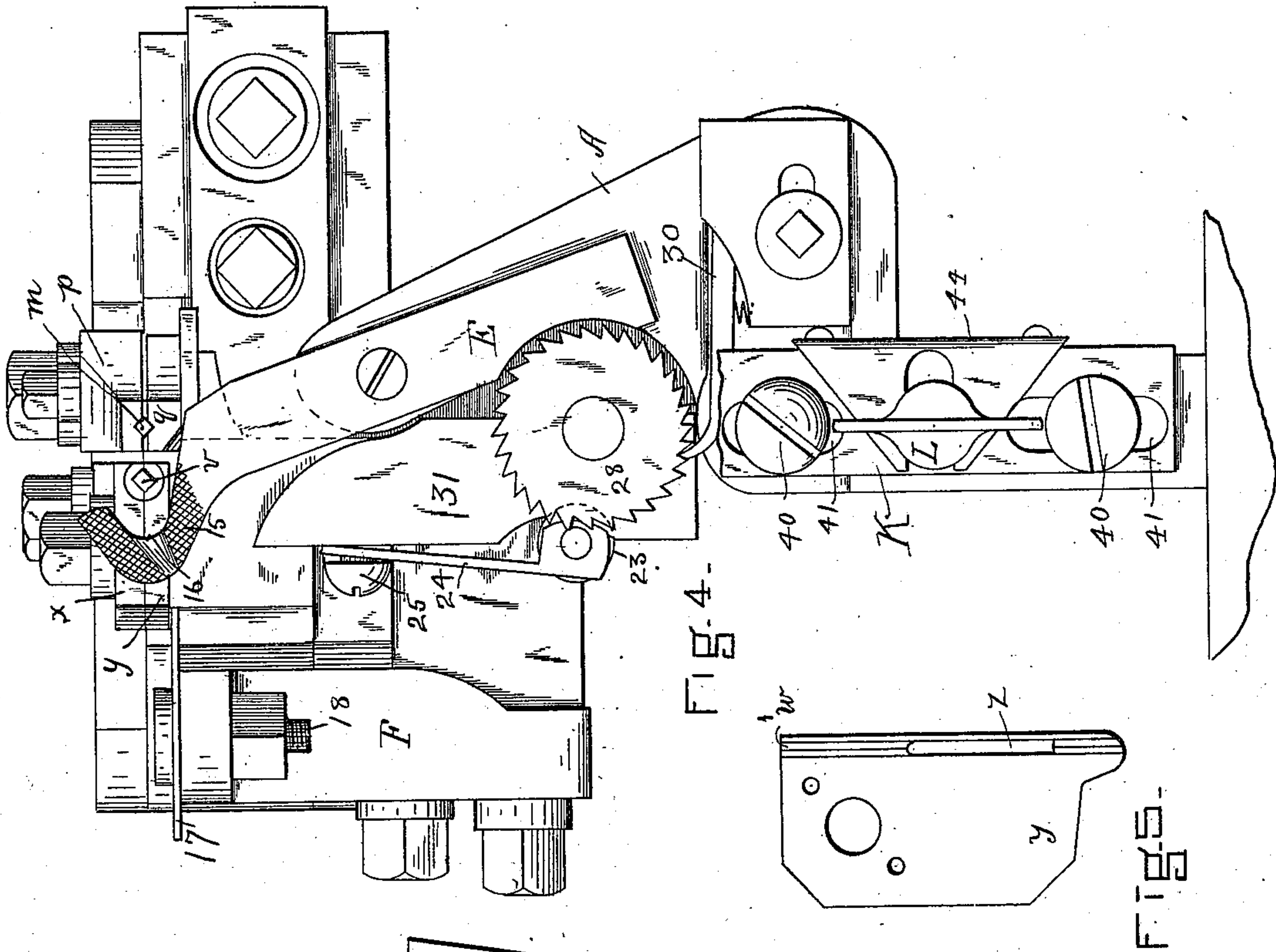
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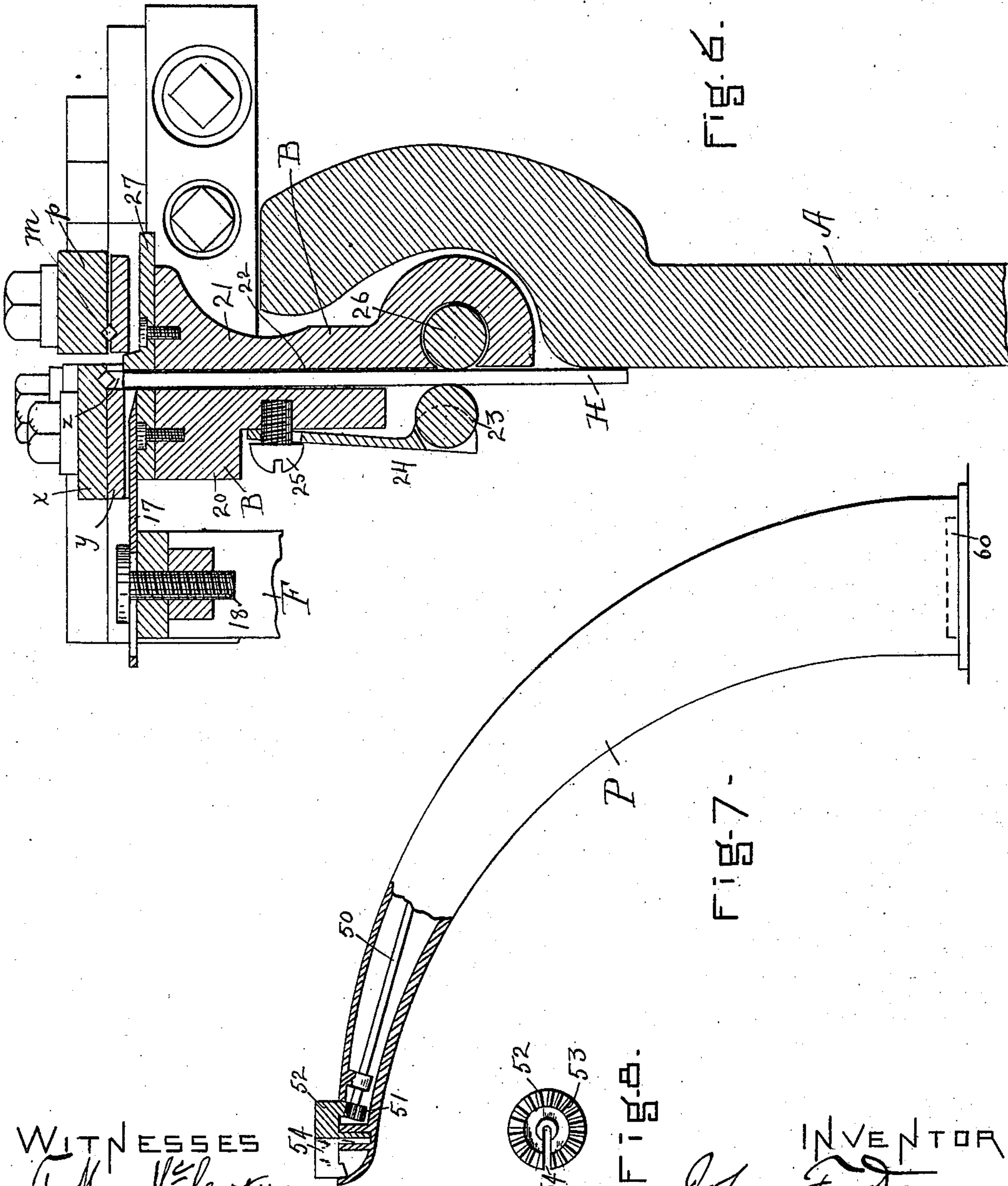
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Fig. 8.

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# UNITED STATES PATENT OFFICE.

JOHN F. DAVEY, OF MARLBOROUGH, MASSACHUSETTS.

## PEGGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 504,311, dated August 29, 1893.

Application filed March 27, 1893. Serial No. 467,736. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. DAVEY, of Marlborough, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Pegging-Machines, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved pegging-machine; Fig. 2, a front elevation of the same a portion of the face-plate being broken away; Fig. 3, a front elevation enlarged showing the peg-chute and cutting mechanism; Fig. 4, a bottom plan view enlarged the gage being broken away to show the peg-slip feed mechanism; Fig. 5, an elevation illustrating details; Fig. 6, a horizontal sectional view showing the peg cutting-mechanism; Fig. 7, a side elevation partly in section of the horn; and Fig. 8 a bottom plan view of the horn-head.

Like letters and numerals of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to that class of pegging machines in which wooden pegs are employed; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the machine which is adapted to be mounted on a standard or bench. In the top thereof a shaft, *b*, is journaled bearing a loose pulley, *f*, and fast drive-pulley, *d*.

At the front of the machine and arranged vertically an arm, B, is mounted on a central pivot, *g*, (see Fig. 1.) This arm is fitted to rock laterally and carries the awl and peg-driving mechanism. Said arm is provided at its upper end with two rollers, *h*, alternately engaged by a cam, *i*, (see Fig. 2) on the shaft, *b*.

A block, C, is fitted to slide vertically in

suitable ways in the arm, B, and is actuated by a roll, *j*, shown by dotted lines in Fig. 2, which works in a cam-groove, *k*, of a cam, D, mounted on the shaft, *b*. The block, C, carries the awl, *m*, which is held in a suitable clamp, *p*, in the lower end of said block. The end of the awl-clamp, *p*, is corrugated at, *q*, (see Fig. 4.) A face-plate, *r*, covers the block-ways in the arm, B.

Secured to the block, C, by a clamp, *t*, there is a hammer-bar, *v*, arranged at a distance from the awl corresponding to the spaces required between the pegs in the shoe, the awl being adjustable laterally in its clamp, *p*, for this purpose. The hammer-bar, *v*, works in grooves, *w*, (see Fig. 5) in two guide-plates, *x*, *y*, bolted to the arm, B, below the clamp, *t*. The inner plate, *y*, has a slot, *z*, (Fig. 5) to receive the peg into the chute formed by the grooves, *w*.

A presser-foot, E, (Fig. 4) is bolted to the body, A, and has a hook-shaped corrugated head, 15, into which the end of the hammer-clamp projects when the arm, B, rocks as hereinafter described. Said head has a knife-edge, 16, to trim the pegs as they pass in feeding the sole.

An arm, F, is bolted to the body, A, and a knife, 17, is fixed on said arm at right angles thereto. Said knife projects at the rear of the hammer-guide-plate, *y*, (see Fig. 6) and is adjustable longitudinally by a screw, 18, passing through slots in said knife and the arm.

The peg-slip feed-mechanism is carried by the arm, B, and comprises two, plates, 20, and, 21, (Fig. 6) arranged to form a passage, 22, for the strip, H, registering with the opening, *z*, in the hammer-guide. On the plate, 20, a tension guide-roll, 23, is supported in a spring-arm, 24, adjustable by means of a screw, 25. Parallel with the roll, 23, a feed-roll, 26, is journaled in the plate, 21. The strip, H, passes between said rolls and is fed thereby through passage, 22, into the path of knife, 17. A cutter-head, 27, is secured to the plate, 21, opposite the knife, 17, and forces the strip, H, against said knife as the arm, B, moves, detaching a peg which is carried into the slot, *z*, and into the path of the hammer by said strip again advancing. The roll, 26, is actuated to advance the peg-strip, H, by means of a ratchet,



28, on the lower end of the journal, 36, of said roll. This is driven one tooth as the peg carriage is moved from left to right, by a spring-pushed click or actuating pawl, 30, fast on  
 5 the body, A. The bottom of the passage, 22, is formed by plate, 31, on the arm, B, and the top of said passage by a gage, 32, (Fig. 1) adjustable vertically on said arm. A flat spring, 37, (Fig. 1) bears against the upper end of  
 10 the journal, 36, of the roll, 23, tensioning it so that the pawl will not throw it too far.

A horizontal-arm, K, is fitted to slide on screws, 40, passing through slots, 41, into the bottom of the body, A. The outer end of  
 15 said arm is rounded at, 42, and on top thereof is a beveled wheel, 43, which is fitted to rotate. Said wheel and the arm end form a gage or guide for the sole of the shoe, and are disposed adjacent the awl and hammer.

20 A slotted plate, 44, fast to the body, A, overlaps the arm, K, and a cam-screw, L, is turned into said arm through said slot whereby the arm may be adjusted longitudinally to set the gage.

25 A horn, P, in its general features of ordinary construction, is shown in Fig. 7. Said horn is fitted to turn on its base in the usual manner and has a shaft, 50, running there-through bearing on its upper end a pinion,  
 30 51. A head, 52, horizontally arranged is fitted to rotate in the upper end of the horn, said head having a beveled-gear, 53, on its lower face meshing with the pinion, 51. The head is slotted radially at, 54, to receive the  
 35 end of the peg. The shaft, 50, in the horn is driven by a gear, 60, near the swivel of the pivot thereof.

In the use of my improvement, the shoe mounted on the horn is held with the sole  
 40 against the guide-arm, K, suitably adjusted by means of the key or screw, L. The shaft, b, giving motion to the cam, i, rocks or reciprocates the arm, B. The cam, D, carrying the roll, j, drives the block, C, bearing the awl and  
 45 hammer. The awl is forced thereby through the sole and the rocking-arm feeds the shoe from right to left, as viewed in Fig. 2. This movement of the arm drives the cutter-head,  
 50 27, against the peg-strip, H, forcing it onto the knife, 17, and detaching a peg. The return motion of the arm actuates the ratchet, 28, feeding the strip along and driving the peg thus detached into the slot, z, of the hammer-groove,  
 55 w, under said hammer, the awl and hammer being elevated by this movement of the arm, B. The peg is disposed over the awl-hole thus made and the next downward movement of

the block, C, drives the peg into said hole simultaneously forming another with the awl. The shoe is again fed by the lateral move-  
 60 ment of the arm, B, and the knife-edge, 15, in the presser-foot, E, trims the peg which has been driven. The cams are so arranged that the awl and hammer are elevated during the movement from left to right as viewed in  
 65 Fig. 2 which movement simultaneously actuates the peg forming mechanism and deposits the peg over the awl-hole in position to be struck by the hammer on its downward movement, the awl being driven conjointly there-  
 70 with to form a new peg-hole. The point of the peg is received in the slot, 54, of the head, 52, on the horn, said head being held in the same relative position through all the move-  
 75 ments of the horn in adjusting the shoe to receive the peg, by means of the gears.

Having thus explained my invention, what I claim is—

1. The awl, hammer-bar and their actuating-mechanism in combination with the press-  
 80 er-foot, E, having the hooked-head, 15, disposed adjacent the line of travel of said hammer and provided with the cutting-edge, 16, substantially as and for the purpose set forth.

2. The body in combination with the slid-  
 85 ing-gage, K, the wheel, 43, fitted to rotate on said arm; a projection on said body and the cam-screw, L, in said arm working against said projection whereby the arm may be ad-  
 90 justed.

3. In a pegging-machine a rocking-arm and an awl and hammer mechanism fitted to slide thereon in combination with a stationary  
 95 knife on the machine-body; a peg-strip feed-mechanism carried by said arm and a cutter-head for forcing the strip against said knife.

4. The combination with the pegging-machine provided with the gage, K, of the horn  
 100 having the slotted rotating head, 52, and actuating mechanism for said head.

5. The combination of the body, drive-shaft and cams with the rocking-arm; the cam actuated block sliding thereon and carrying the  
 105 awl and hammer; the grooved guide-plates for said hammer; the stationary knife on said body; the cutter-head on said arm and the peg-strip feed-mechanism carried by said arm all being arranged to operate substantially as described.

JOHN F. DAVEY.

Witnesses:

RUFUS O. CLARK,  
 WILLIAM H. COTTING.