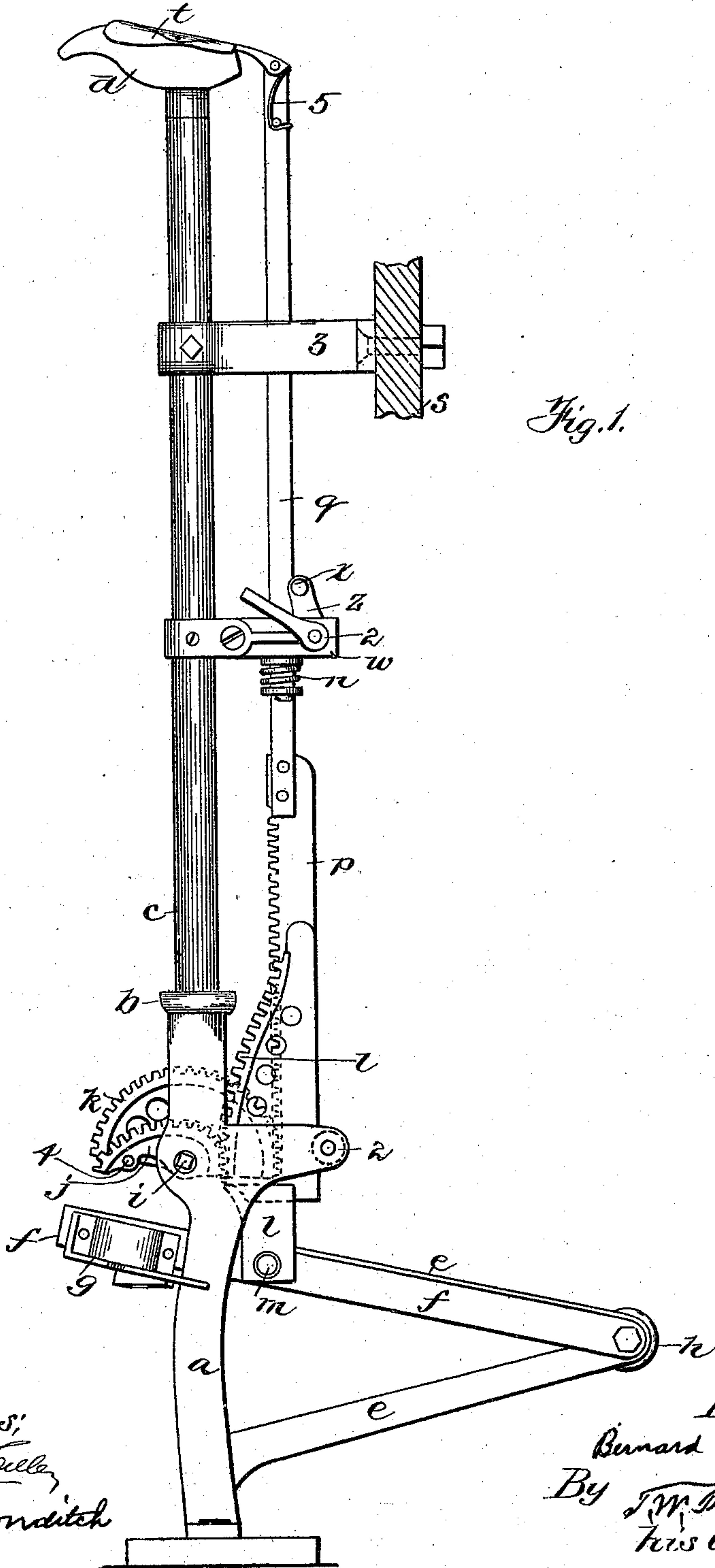


B. GALLAGHER.  
RELASTING MACHINE.

No. 547,346.

Patented Oct. 1, 1895.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

BERNARD GALLAGHER, OF LYNN, MASSACHUSETTS.

## RELASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 547,346, dated October 1, 1895.

Application filed July 8, 1895. Serial No. 555,313. (No model.)

*To all whom it may concern:*

Be it known that I, BERNARD GALLAGHER, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Relasting-Machines, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

In said drawings, Figure 1 is a side elevation of my machine complete. Fig. 2 is a view from the reverse side of Fig. 1 with the upper part broken away. Fig. 3 is a front view of so much of the machine as is shown in Fig. 2.

The object of my invention is to produce an inexpensive, durable, and reliable machine for relasting shoes; and it consists in the novel details of the machine and in its novel combinations, as will be next herein pointed out and specified in the appended claims.

Referring again to said drawings, *a* represents the forked lower part of the machine, preferably formed as an entire casting. The two halves of this casting unite at top, forming socket *b*, in which is secured rod *c*, preferably a piece of pipe, to the top of which is secured last *d*. A forked brace *e e* is at its open ends secured to base *a*, as shown in Figs. 2 and 3, and at its outer end or junction is pivoted to the treadle *f*, which at its front free end is provided with foot-rest *g*. At the rear end of said treadle is arranged a coiled spring *h*, one end of which is attached to said treadle and the other to part *e*, so that said spring when free to act will raise the treadle.

A pivot *i*, secured in part *a*, carries an eccentric gear *j* and a concentric gear *k*. Said gear *j* meshes in and is driven by the curved rack *l*, while gear *k* meshes with and drives the straight rack *p*. When treadle *f* is depressed, its rack *l*, which is pivoted to the treadle at *m*, revolves gear *j*, and as said gear is, by pin 4 or other means, connected with gear *k*, therefore both gears revolve together; but as gear *j* is eccentric and less in diameter than gear *k*, therefore rack *p* will be carried downward with greater rapidity and a greater distance than rack *l*, and hence the stroke of the

treadle is less than the movement of rack *p*. A rod *q*, secured to rack *p*, carries at its top the shoe-horn *t*, that aids in placing the shoe upon the last *d* when *t* is depressed, as explained.

The rolls 2, arranged in short arms extending from part *a*, serve to hold and guide the racks in their vertical movement.

A bracket *w*, secured to standard *c*, carries an arm *z*, held by arm 2, so as to govern the movement of rod *q*. A spring *n*, secured to rod *q* by its contact with bracket *w*, serves to arrest the upward movement of the rod at the desired point. Bracket 3, also secured to upright *c*, serves as means for securing the top portion of the machine to bench *s*, as shown.

A spring 5 is attached to rod *q* and acts against the horn *t* to press it downward toward last *d*.

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

1. In a relasting machine, the combination of the last supporting standard, the eccentric gear *j* and the concentric gear *k* connected and arranged to move together: the treadle provided with a proper foot-rest: the curved rack *l* connected with said treadle and arranged and adapted to rotate the eccentric gear *j*, and the rack *p* arranged to be driven by concentric gear *k* when the same is rotated through gear *j*, and the shoe horn supporting rod *q* extended upward from rack *p* substantially as specified.

2. The combination of base *a*, standard *c* secured therein, last *d* mounted on standard *c*, treadle *f* pivoted to brace *e*, a curved rack *l* pivoted to said treadle, an eccentric gear actuated by rack *l*, a concentric gear *k* secured to gear *j*, a rack *p* actuated by gear *k* the rod *q* extending upward from rack *p* and the shoe horn *t* mounted on rod *q*, all substantially as specified.

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Witnesses:

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