

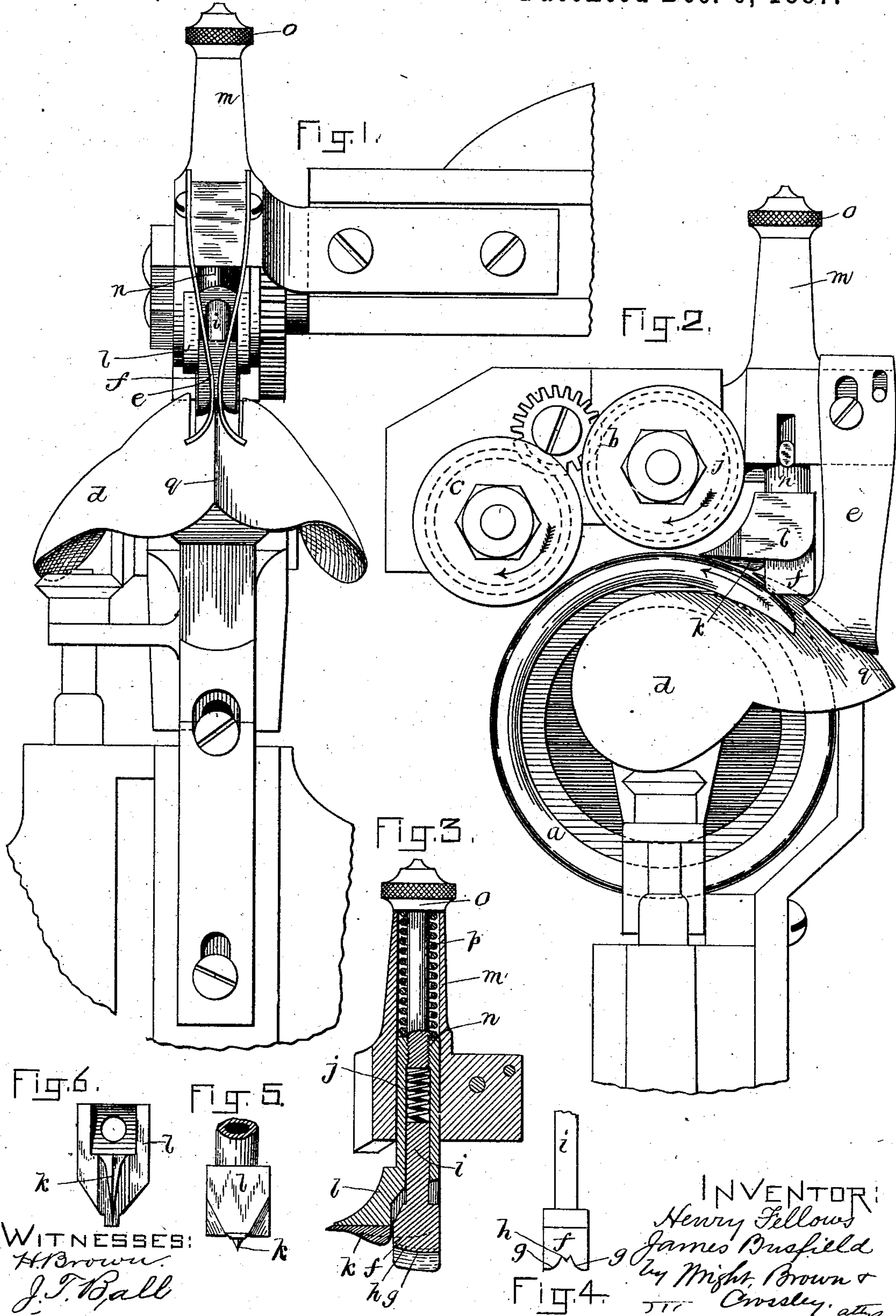
(No Model.)

H. FELLOWS & J. BUSFIELD.

SEAM PRESSING MACHINE.

No. 374,403.

Patented Dec. 6, 1887.



UNITED STATES PATENT OFFICE.

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ASSIGNORS TO THE KENOZA SEAM-PRESSING MACHINE COMPANY, OF
KINGSTON, NEW HAMPSHIRE.

SEAM-PRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 374,403, dated December 6, 1887.

Application filed September 10, 1887. Serial No. 249,324. (No model.)

To all whom it may concern:

Be it known that we, HENRY FELLOWS and JAMES BUSFIELD, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Seam-Pressing Machines, of which the following is a specification.

Our invention relates to seam-pressing machines employed in the manufacture of boots and shoes and other articles made of leather and similar substance, and comprises improvements on the machine shown and described in the application for a patent filed by us on the 14th day of April, A. D. 1887, Serial No. 234,807.

One of the difficulties met with in the operation of machines of this class has been in the means for opening or spreading and guiding the seam on its passage from the hands of the operator to the pressing-rollers, since, unless the projecting edges of the parts seamed together are properly opened or spread and presented to the pressing-rollers in exactly proper position, imperfect work will result.

While the seam opening and guiding devices described and shown in our said application answer very well the purposes for which they are designed, we have found that in order to have them act with absolute certainty on work of uneven bulk or body it is necessary that the "plow" for opening or spreading the projecting edges of the seam just before the same passes to and between the pressing-rollers should have a yielding support independent of the guide, which precedes said plow, and which guides and holds said edges in proper position and effects a preliminary spreading of the same.

With the before-mentioned facts in view, our present invention consists in so constructing the plow or final seam-spreading device that it shall be vertically yielding independent of the vertically-yielding guide and preliminary spreader, and in so forming both the guides and plow that they will guide and spread the seam in such manner as to present the same with certainty in exactly proper position to the seam-pressing rollers, and do this irrespective of the uneven character as to bulk

of the work, all as hereinafter fully described, and subsequently set forth in the claims.

Reference is to be had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification, the same letters indicating the same parts in all of the views.

Of the drawings, Figure 1 represents a front view of so much of a seam-pressing machine as is necessary to explain our present improvements, which are embodied in the parts of the machine shown. Fig. 2 is a side or end view of the same. Fig. 3 is a vertical central sectional view of the combined guide and preliminary seam-opener, the plow or final seam-opener, and supports for said devices. Fig. 4 is a front view of the combined guide and preliminary seam-spreader. Fig. 5 is a similar view of the plow or final seam-spreader, and Fig. 6 is a bottom plan view of the same.

In the drawings, *a* designates the lower seam-pressing roller, and *b c* the upper rollers. These parts are constructed, arranged, and operated substantially as shown and described in our aforesaid application, and need not be further explained herein.

d designates a hood arranged over the adjuncts of and gearing for operating the roller *a* to keep the material being operated upon from being caught by said gearing, the forward part of which hood serves also as a support and guide for the work as it enters between the spring-finger guides *e e* on its way to the combined guide and preliminary seam-opener *f*. This guide *f* is provided in its under or lower face with a groove, the sides *g g* of which are inclined toward each other, a V-shaped tongue or rib, *h*, extending through the groove, as shown in Fig. 4. The shank *i* of the guide *f* extends up into a hole or bore made in the shank of the plow to be presently described, and a spring, *j*, in said hole or bore keeps said guide *f* pressed downward with a yielding pressure on the work.

k designates the plow or final seam opener or spreader, consisting of a strip secured to or forming an integral part of the shoe *l*, which plow, at the end adjacent to the rear end of the rib *h* of guide *f*, is sharp or angular, the sides

diverging toward the rear, as best shown in Fig. 6. The shank of the shoe *l* extends through a bore in a supporting-bracket, *m*, said shank being provided at a point in the bore of said bracket with an offset, *n*, between which and the thumb-nut *o*, screwed on the top of said stem, is interposed a spring, *p*, whereby the plow and guide-shoe are held down upon the work with a yielding pressure independent of the combined guide and preliminary seam-opener *f*.

The operation of the improvements is as follows: The work is placed upon or astride of the forward portion, *q*, of the hood *d*, so that the projecting edges of the seam will pass between and be held up and guided by the spring guide-fingers *e* into the groove of the combined guide and preliminary seam-spreader *f*. The inclined sides *g* of said groove will tend to keep said projecting edges still in upright position, while the V-shaped rib *h* will enter between the extreme ends of said edges and spread the same apart slightly, so that as the work passes to the rollers the plow *k* will enter between said projecting edges and spread the same apart and roll them over into exactly proper position to be caught by the rollers and pressed or "rubbed" down without liability of breaking the stitches of the seam.

The plow *k* and guide-shoe *l* and combined guide and preliminary seam-spreader *f* being each vertically yielding independent of the other, provision is made whereby work of uneven bulk may be operated upon without danger of being thrown out of line with the pressing-rollers.

It is obvious that changes may be made in the form and arrangement of the parts comprising our invention without departing from the nature or spirit thereof.

What we claim is—

1. A guide and preliminary seam-opener, *f*, and plow *k*, and their supports, said guide and plow being vertically yielding independent of each other, combined with seam-pressing rollers, as set forth.

2. In a seam-pressing machine, the combination, with pressing-rollers, of a guide and seam-opener provided with a groove having inclined sides for engaging the sides of the projecting edges of the parts seamed together to press said edges toward each other, and a tongue or rib intermediate of said inclined sides to enter between the edges to spread the same slightly, and a second seam-opening device, consisting of a plow-shaped contrivance to enter between the edges and fully spread the same, both of said seam opening devices having independent springs to press them down on the work, as set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 23d day of August, A. D. 1887.

HENRY FELLOWS.
JAMES BUSFIELD.

Witnesses:

EDMUND B. FULLER,
E. FRANK HORNE.