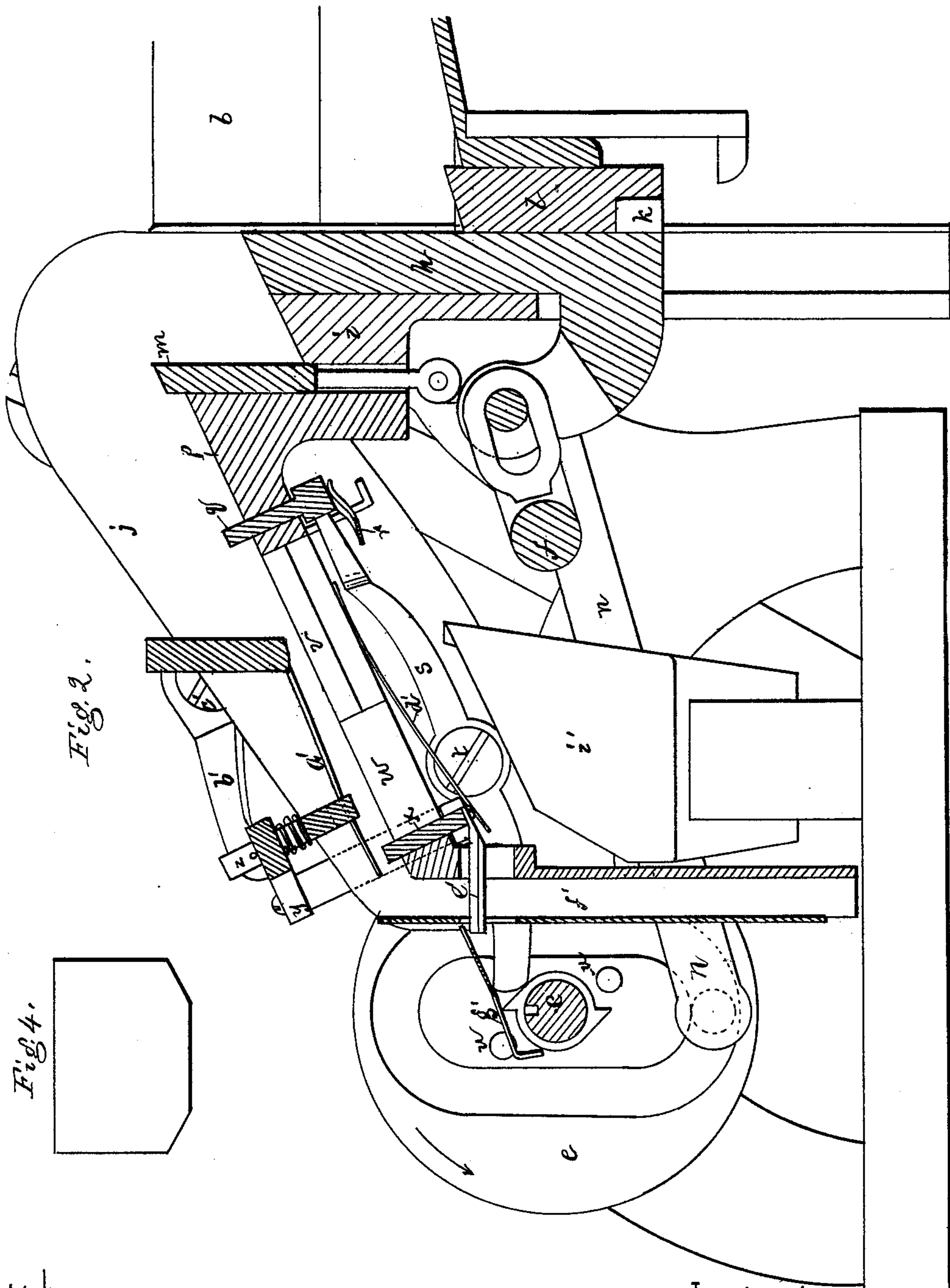


B. BEVELANDER.
NAIL SEPARATING MACHINE.

No. 176,268

Patented April 18, 1876.



Witnesses.
L. H. Latimer.
W. J. Pratt.

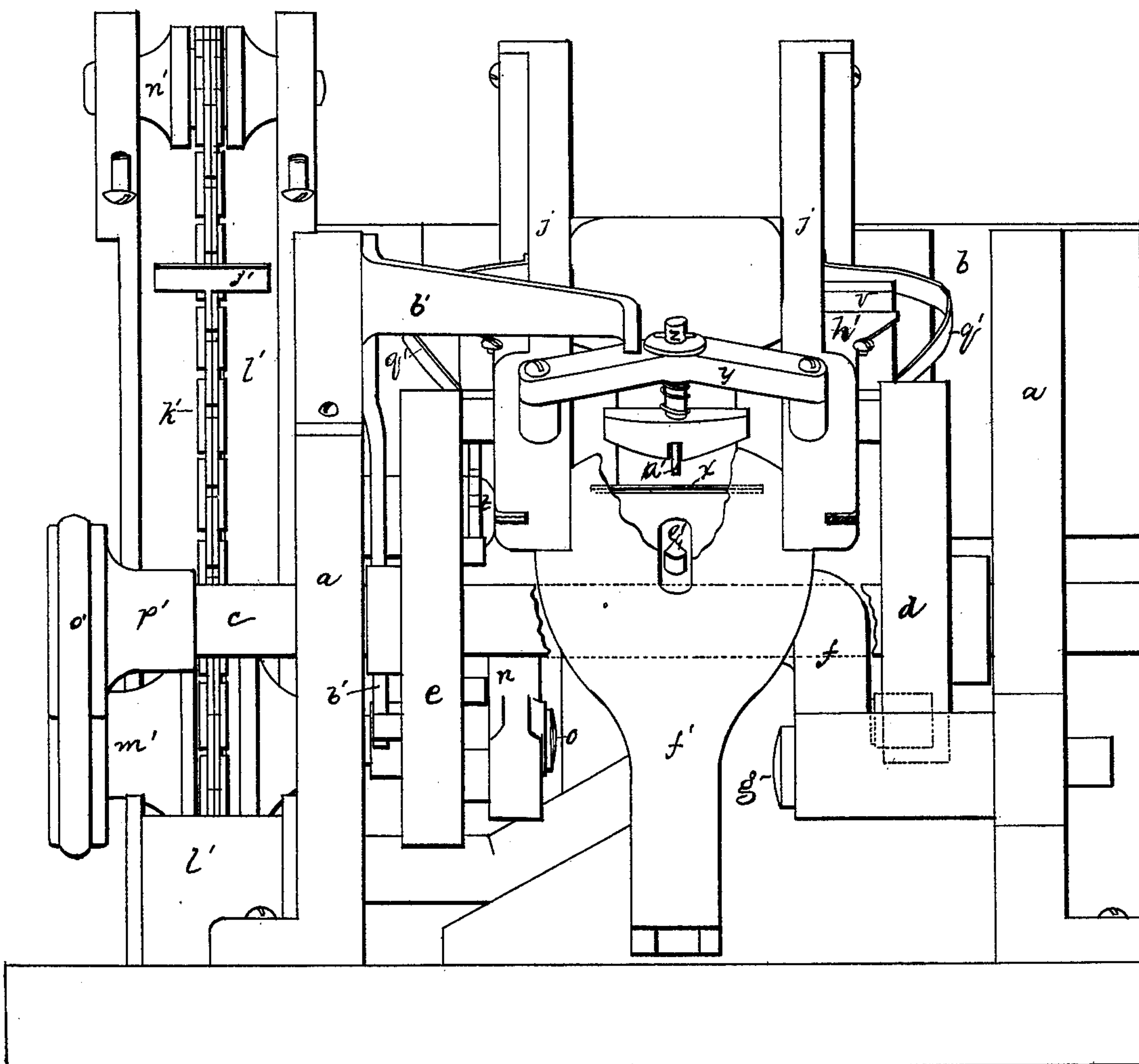
Inventor.
Benjamin Bevelander
per Lewis Gregory Atty

B. BEVELANDER.
NAIL SEPARATING MACHINE.

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Fig. 3.



Witnesses.

L. H. Latimer.
W. J. Pratt.

Inventor.

Benjamin Bevelander
per Lewis & Greany Attys

UNITED STATES PATENT OFFICE.

BENJAMIN BEVELANDER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
GLOBE NAIL COMPANY.

IMPROVEMENT IN NAIL-SEPARATING MACHINES.

Specification forming part of Letters Patent No **176,268**, dated April 18, 1876; application filed
February 11, 1876.

To all whom it may concern:

Be it known that I, BENJAMIN BEVELANDER, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Mechanism for Assorting Horseshoe-Nails, of which the following is a specification:

This invention relates to mechanism for automatically selecting, assorting, and correctly presenting blanks for horse or animal shoe-nails into a guide-tube to be subjected to the action of die-rolls, substantially as represented in Patent No. 121,511, or to other suitable apparatus to shape and shear the excess of metal from the points of the nails, and is an improvement on Patent No. 135,312. In Patent No. 121,511 the attendant of the machine picks out each nail-blank from a mass of nail-blanks in a hopper, and presents it head foremost into the guide-tube, and the nail-blanks placed in the guide-tube have their flat sides always against one face of the tube to correctly deliver the blank to the shaping die-rolls.

The object of this invention is to present the nail-blanks into this guide-tube automatically. In this machine blanks in bulk in a hopper are lifted, one or more, at each movement of the lifter and placed on a shelf from which the nails are raised singly by a selector and placed on a table, over which they move down to a nail-detainer, which is shown as a slide-bar. Some of the blanks on this table will present their straight flat sides against the table, and such blanks will be considered right-side up, and others of the blanks will present against the table the side of the blank from which the head projects, and such nails will be considered wrong-side up. When the detainer is retracted the nail held by it, if right-side up, will slide down the inclined way between the guides, and will pass under the gage and down to the stop, and nails right-side up will be accumulated in the inclined way above the stop. Now, when the stop is removed or retracted, the second nail above the stop is pressed and held by the holder, and the lowermost blank in the slide will be allowed to fall into the mouth of the guide-tube, and a deflector in the mouth of the tube

will meet the edge of the blank and stop it sufficiently long to permit the head of the blank, the heaviest end, to get the start of the point end, and the head of the blank will therefore always lead in the passage of the blank through the guide-tube and to the die-rolls. All the blanks wrong-side up will be stopped by the gage shaped on its under side to permit the passage under it of only such blanks as are right-side up, and blanks stopped by the gage, and supported at their ends by slide-rests, are dropped into a blank-receiving box as the slide-rests are retracted, and from this box the blanks are carried by a feeding mechanism back to the hopper.

This invention consists in combinations of mechanism such as hereinafter described.

Figure 1 represents this improved machine in top view. Fig. 2 is a section thereof on line *x x*, Fig. 1. Fig. 3 is a front view of the improved machine; and Fig. 4, a detail of the gage.

The frame *a* of the machine is shaped and constructed to properly sustain the working parts, and at its upper portion is the hopper *b* adapted to receive the blanks in bulk. The shaft *c*, driven by power in any usual way, is provided with two cam disks, *d e*, each; in this instance provided with a cam-groove in its side face. The cam-disk *d* receives in its groove a pin or roller on arm *f*, pivoted at *g*, and connected with the lifter *h*, adapted to move up through the bottom of the hopper, and lift one, two, or more blanks from the hopper and place them on the shelf *i* between guides *j j*. A pin or projection, *k*, on the lifter raises the slide-piece *l* as the lifter rises, and the lifter and slide descend together, thereby preventing blanks from becoming crowded between them. At the lower edge of the inclined shelf *i* is a selector, *m*, made as a slide-bar, and connected by a link with the forward end of lever *n*, pivoted at *o*, and provided with a pin or roller to enter the cam-groove in cam-disk *e*. This selector *m* lifts a single blank and places it on the table *p*, and the blank slides down over the surface of the table, and is arrested by a detainer, *q*, held up in operative position by a spring, *r*, and

R. & W. C. BLAKISTON.
MACHINE FOR WAXING AND TARRING SOFT CORDING, ROPE-
YARNS, &c.

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Fig 1

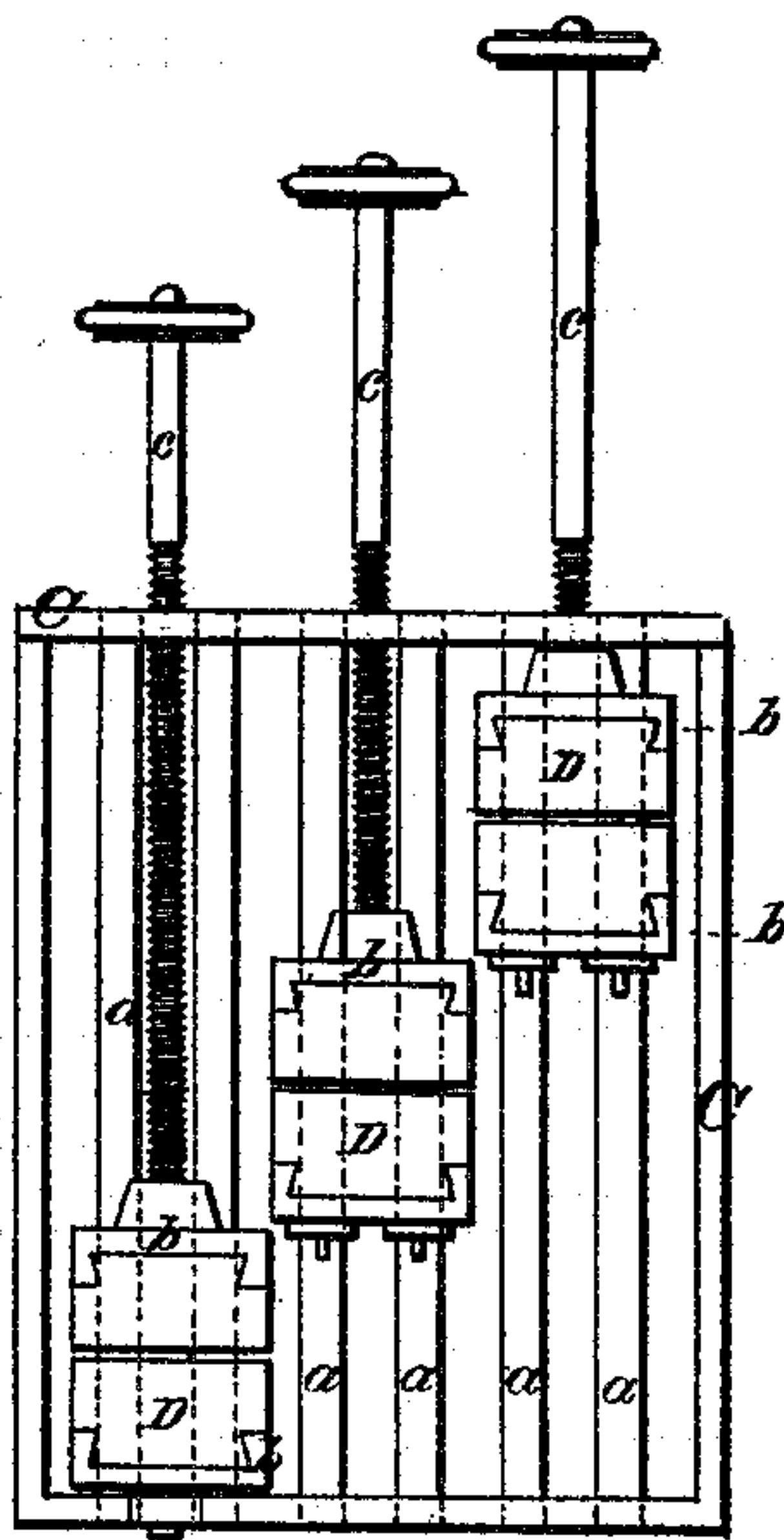
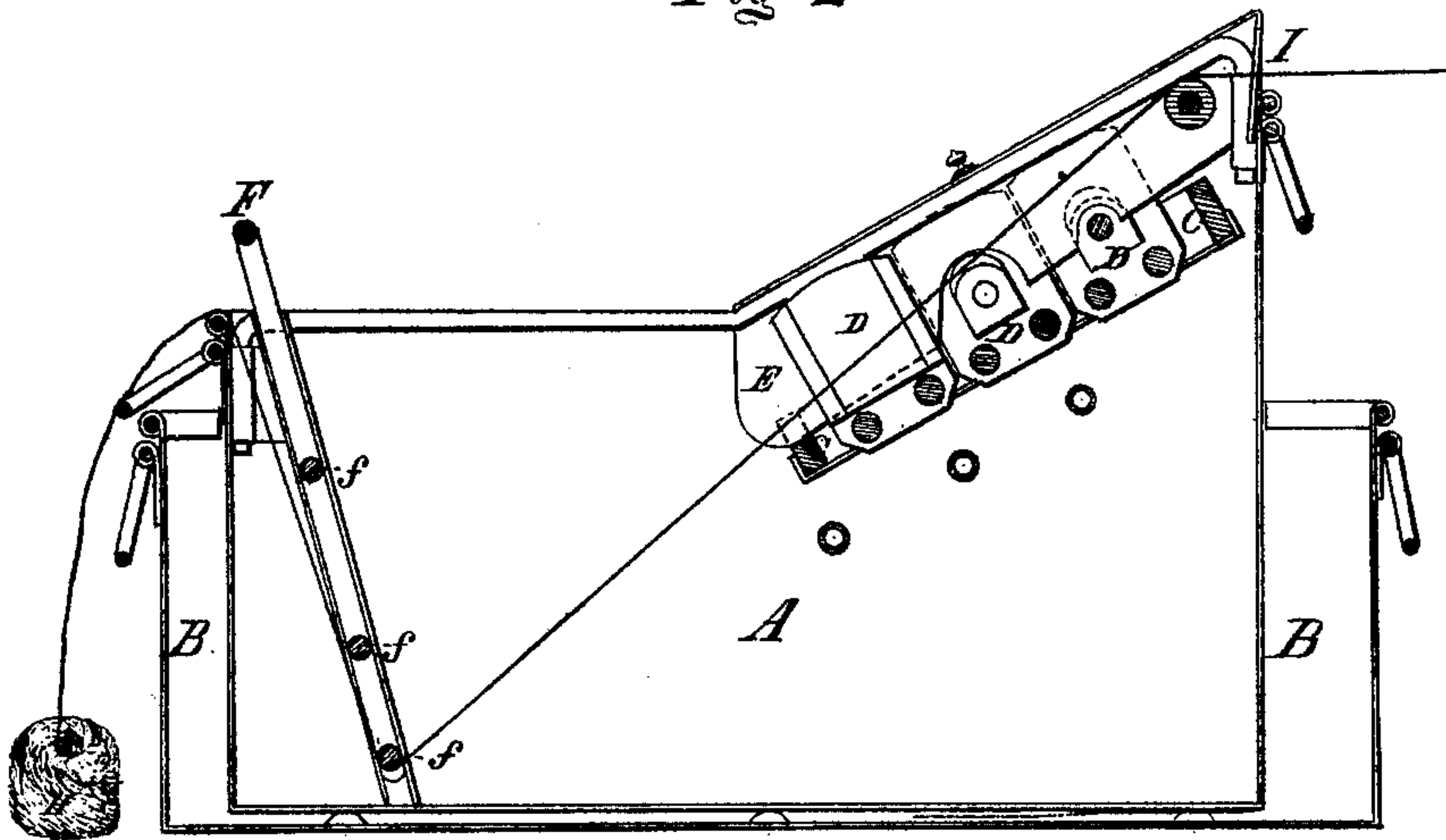


Fig 2



Witnesses.

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