J. D. BAIRD.

Machines for Assorting Nails.

No. 152,821. Patented July 7, 1874.

Fig 1

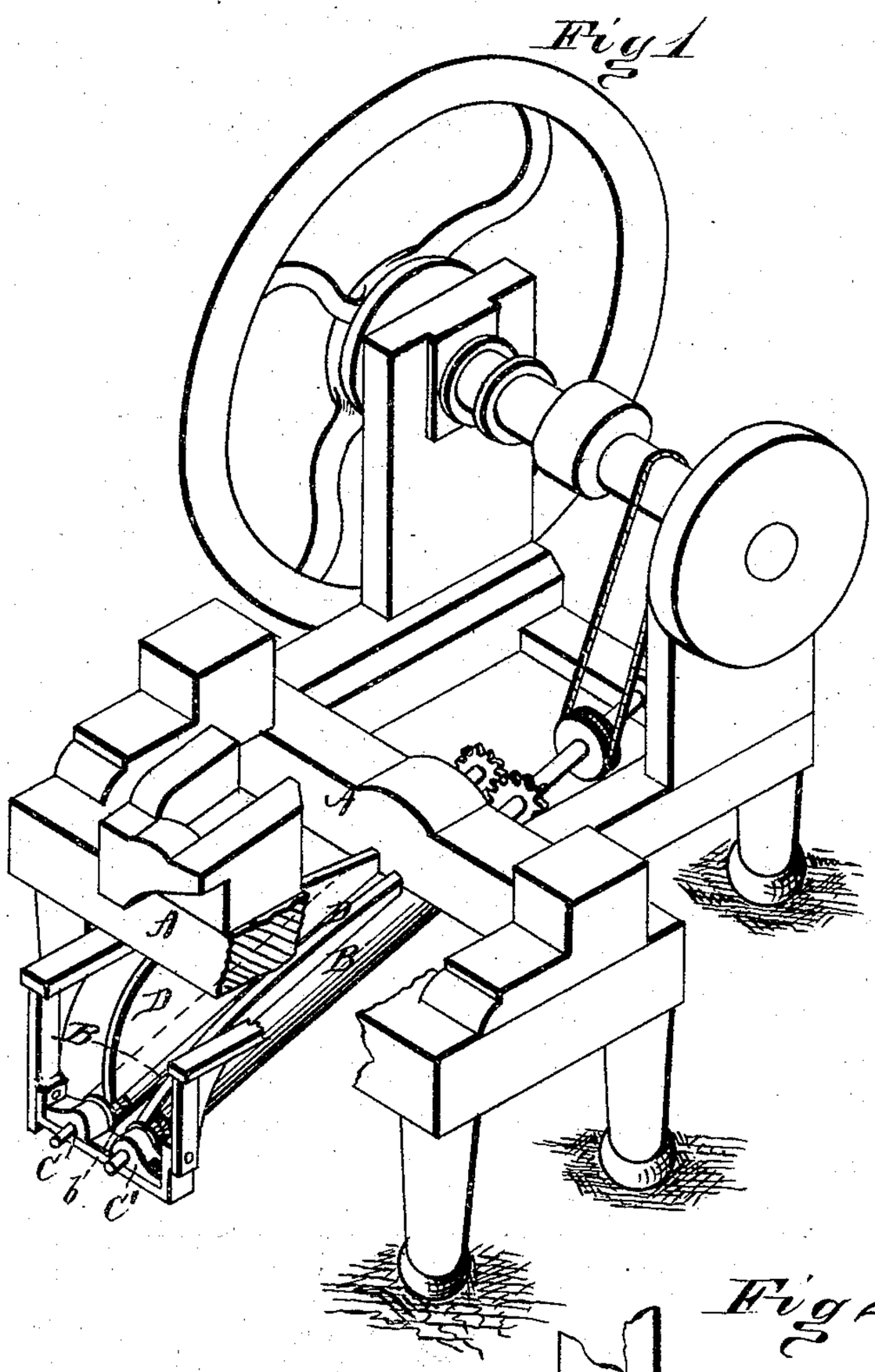
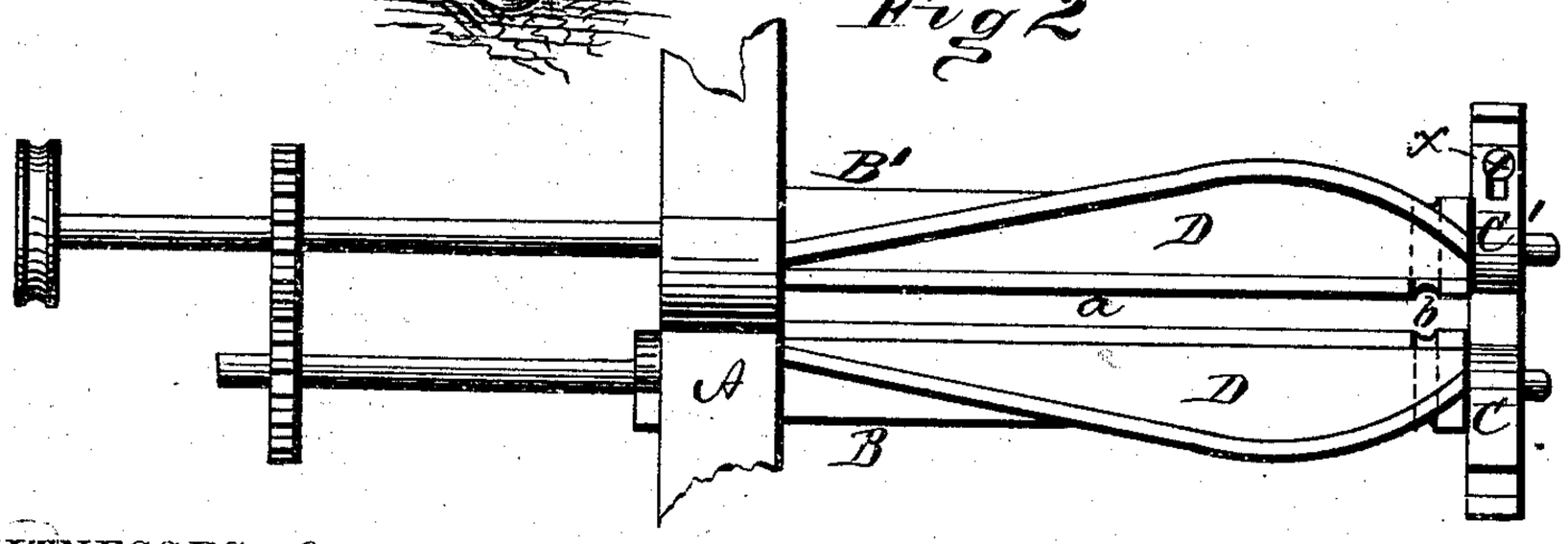


Fig 2



WITNESSES.

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JOHN D. BAIRD, OF MANCHESTER, VIRGINIA.

IMPROVEMENT IN MACHINES FOR ASSORTING NAILS.

Specification forming part of Letters Patent No. **152,821**, dated July 7, 1874; application filed May 13, 1874.

To all whom it may concern:

Be it known that I, JOHN D. BAIRD, of Manchester, in the county of Chesterfield and in the State of Virginia, have invented certain new and useful Improvements in Assorting Attachments for Nail, Spike, and Tack Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to devices for separating imperfect nails, spikes, or tacks, slivers, dirt, &c., from the perfect nails, spikes, or tacks in a nail, spike, or tack machine; and it has for its object to accomplish this separation in a rapid and complete manner.

The nature of my invention consists in the combination, in a nail, tack, or spike machine, of one or more inclined stationary plates or rollers with one or more inclined revolving rollers, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my invention, and Fig. 2 is a plan view of the same.

A represents the frame-work of a nail or tack machine. B B′ represent two rollers in cylindrical form, of metal or other suitable hard material, and of any required dimensions. These rollers are placed in an inclined position, as shown, and are made to revolve outward from the nails passing between them, which motion may be obtained from the spindle of the nail-machine, or in any convenient manner. The roller B′ has its bearing at the lower end in a slotted box, C, which is held to the frame by a set-screw, *x*, so that the opening *a* between them may be made larger or smaller, as required, to suit different sizes of nails, or tacks, or spikes. This apparatus is provided with a wing, D, on each side, to conduct the nails or tacks to the rollers.

This apparatus, properly put together, may be adjusted to the nail and tack machine under the point where the nail or tack leaves the dies. The nails or tacks, as they are cut, fall on or are guided to the opening *a* by the wings D D on each side. The inclination and revolving motion of the rollers carry the good nails to the lower end of the apparatus, where they drop, through circumferential grooves *b* in the rollers, into a keg or box, while the imperfect nails or tacks, slivers, dust, dirt, &c., fall through the opening *a* into a receptacle prepared for them.

The above simply refers to the employment of one pair of rollers, but it is self-evident that any number of rollers may be used, they being arranged with openings between them; also, in place of pairs of rollers, each roller may be used in combination with a guide-plate, with openings between them, to be made adjustable in the same manner as above described.

I am aware that a slotted conductor, in combination with a nail cutting and heading machine, is not new, the same being shown in the patent granted to John Coyne, dated June 3, 1873; hence I do not claim such combination.

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

The combination, in a nail, tack, or spike machine, of one or more inclined stationary plates or rollers, B, with one or more inclined revolving rollers, B′, as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JNO. D. BAIRD.

Witnesses:
A. N. MARR,
F. L. OURAND.