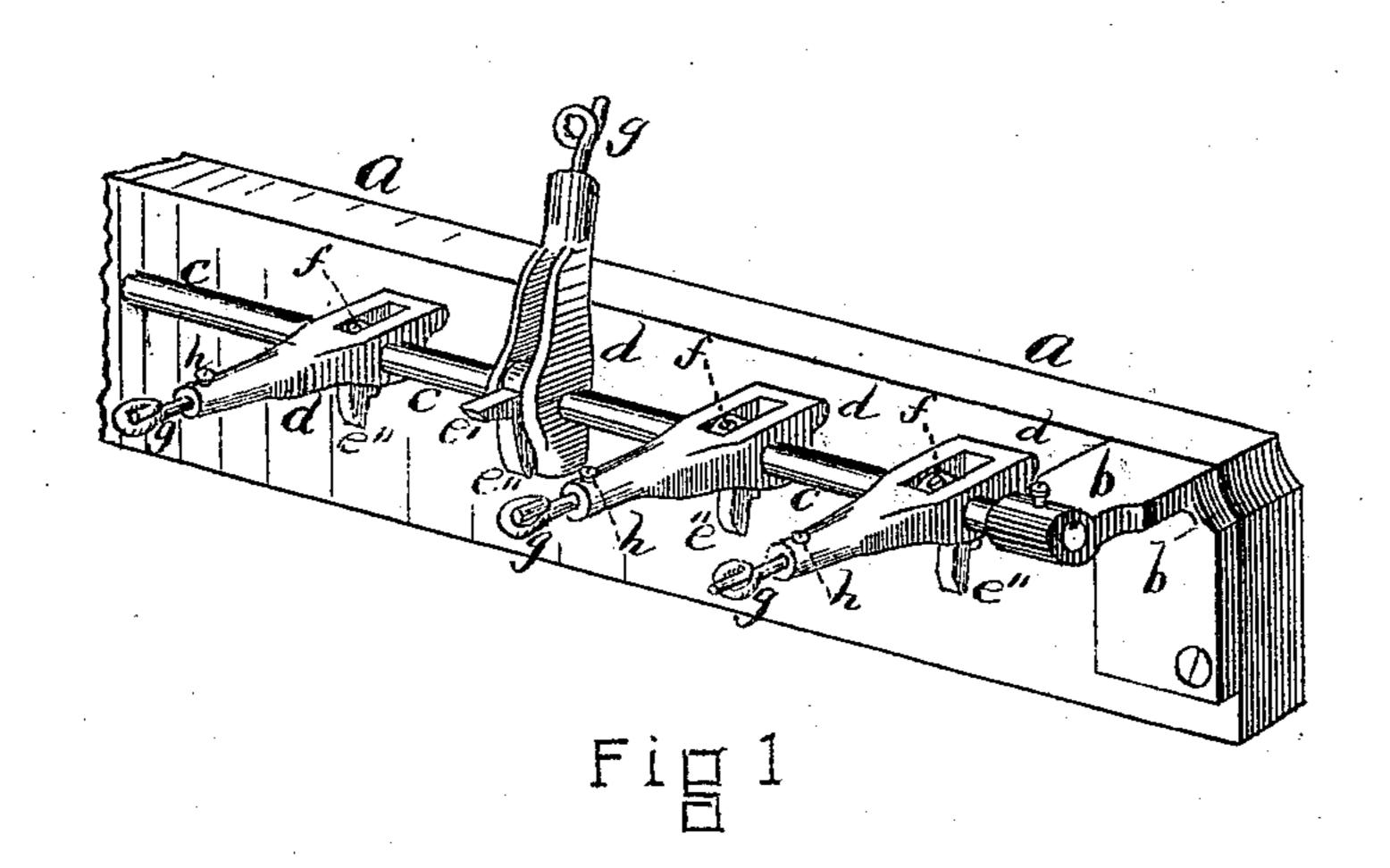
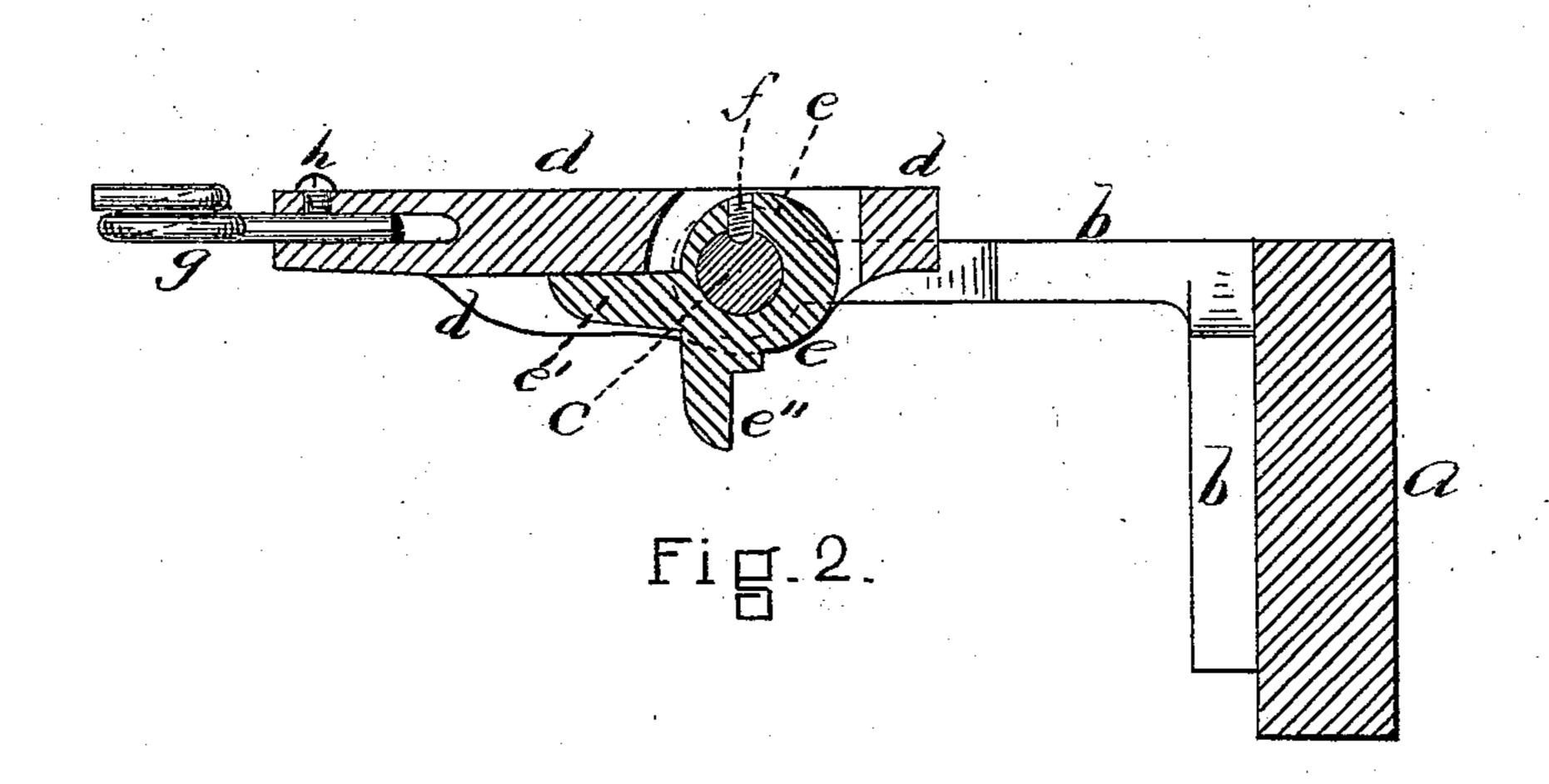
## N.I. ALLEN.

FINGER-BOARDS AND HOLDERS FOR SPINNING-FRAMES, &c. No. 184,816.

Patented Nov. 28, 1876.





WITNESSES

Bromacian

Mro. W. Blich,

Mohalag Mellen By his Attys.

Jerry Williams of

## United States Patent Office.

NICHOLAS I. ALLEN, OF MILFORD, MASSACHUSETTS.

IMPROVEMENT IN FINGER-BOARDS AND HOLDERS FOR SPINNING-FRAMES, &c.

Specification forming part of Letters Patent No. 184,816, dated November 28, 1876; application filed July 26, 1876.

To all whom it may concern:

Be it known that I, NICHOLAS I. ALLEN, of Milford, in the county of Worcester and State of Massachusetts, have invented a new and Improved Adjustable Finger-Board or Guide-Wire and Holder for Spinning-Frames or Twisters; and I 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.

In the said drawings, Figure 1 is a view, in perspective, of a portion of a roller-beam, showing my improved guide-wire and holder. Fig. 2 is a transverse vertical section of the same, taken longitudinally through one of the holders.

Similar letters of reference indicate corre-

sponding parts.

This invention is an adjustable guide-wire and holder for use in spinning-frames and twisters, and is an improvement upon or sub-

stitute for the ordinary finger-board.

a represents the roller-beam, constructed as usual. c is a round rod, with or without a longitudinal groove cut in its upper side, and supported by the brackets or supports b, extending from the roller-beam a. d d are the metallic holders, taking the place of the ordinary finger-board, and placed, some distance apart from each other, loosely upon the rod c, so that they can be easily raised or dropped. e e are slides, one of which is placed in an opening in each metallic holder d, and is arranged to slide upon the rod c. A screw, f, keeps each slide e in place. When the holder d is in a horizontal position, it rests upon the projection e', which extends from the slide e. When the holder is in a perpendicular position it is prevented from falling back by means of the projection e''. g g are the guide-wires or eyes placed in the metallic holders d, and held in place and rendered adjustable by means of the screws h.

It will readily be seen that in case the guidewires and holders need moving, the screw f can be loosened and the slides e pushed in either direction, thus carrying with them the metallic holders d. The eyes or guide-wires can be also easily adjusted in the holders by means of the screws h, so as to be placed directly over the spindles. The space which is afforded between the metallic holders d allows the waste to drop through instead of collecting upon the finger-board, thus saving a large amount of waste from being twisted in with the yarn while passing from the rollers to the bobbins.

My guide-wires and holders being much cheaper to manufacture than the ordinary finger-board, quite an item of expense is saved in this respect.

A variation of the invention would consist of a metallic holder, d, held upon the rod by means of a set-screw, and provided with a joint between the rod and the end of the holder.

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

1. The combination of the rod c and the slides e, provided with projections e' e'' and screws f, with the metallic holders d and adjustable guide-wires g, placed at proper distances apart, and constructed and operated substantially as herein set forth.

2. In a spinning-frame or twister, the combination, with a roller-beam and rod, substantially as above described, of the series of adjustable guide-wires g and adjustable holders d d, all substantially as and for the purpose hereinbefore set forth.

NICHOLAS I. ALLEN.

Witnesses:

HENRY W. WILLIAMS, B. W. WILLIAMS.