No. 703,271. Patented June 24, 1902.

W. E. JELF.

PAPER JOGGER.

(Application filed Aug. 9, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1

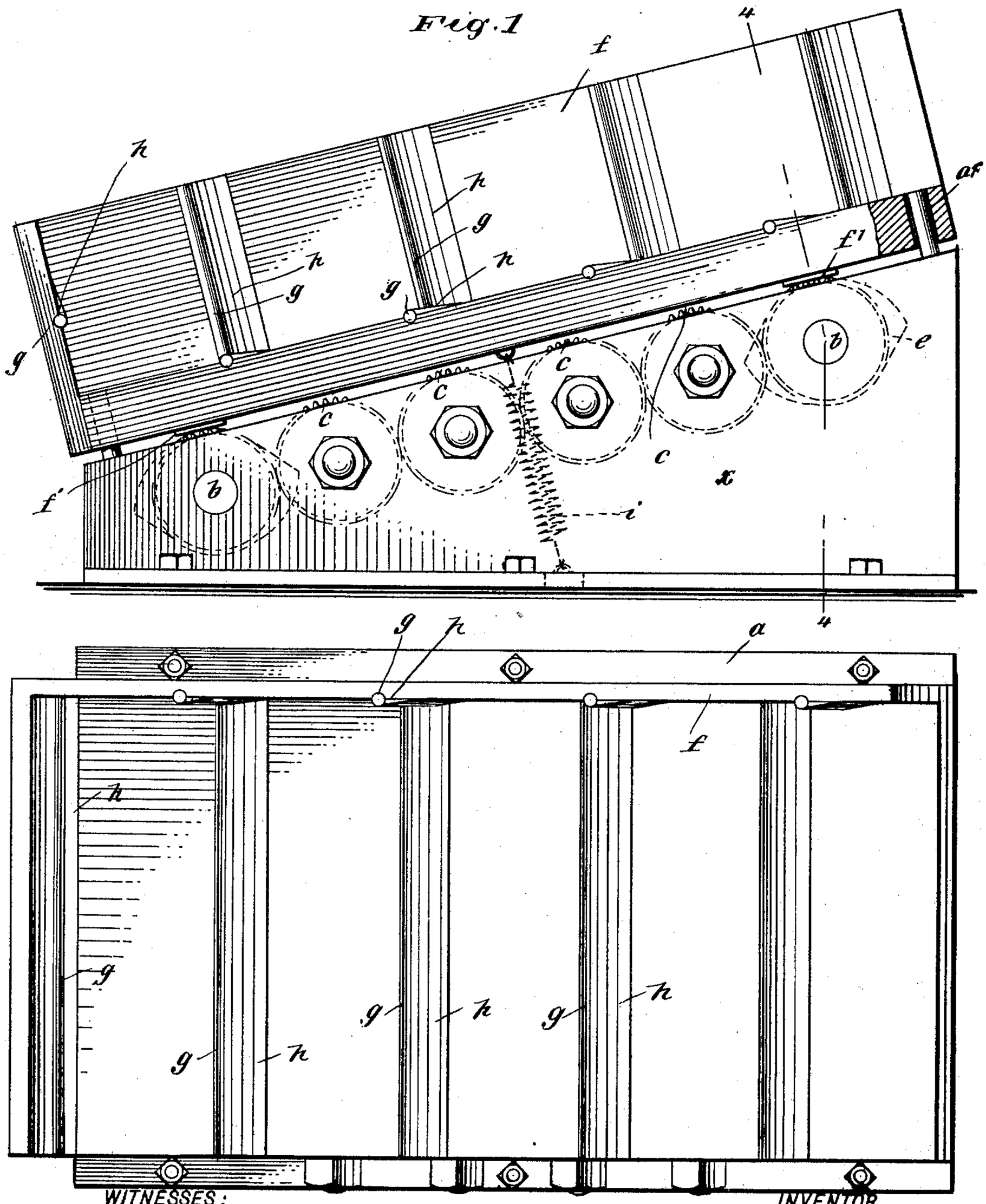

Fig. 2

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Fig. 3

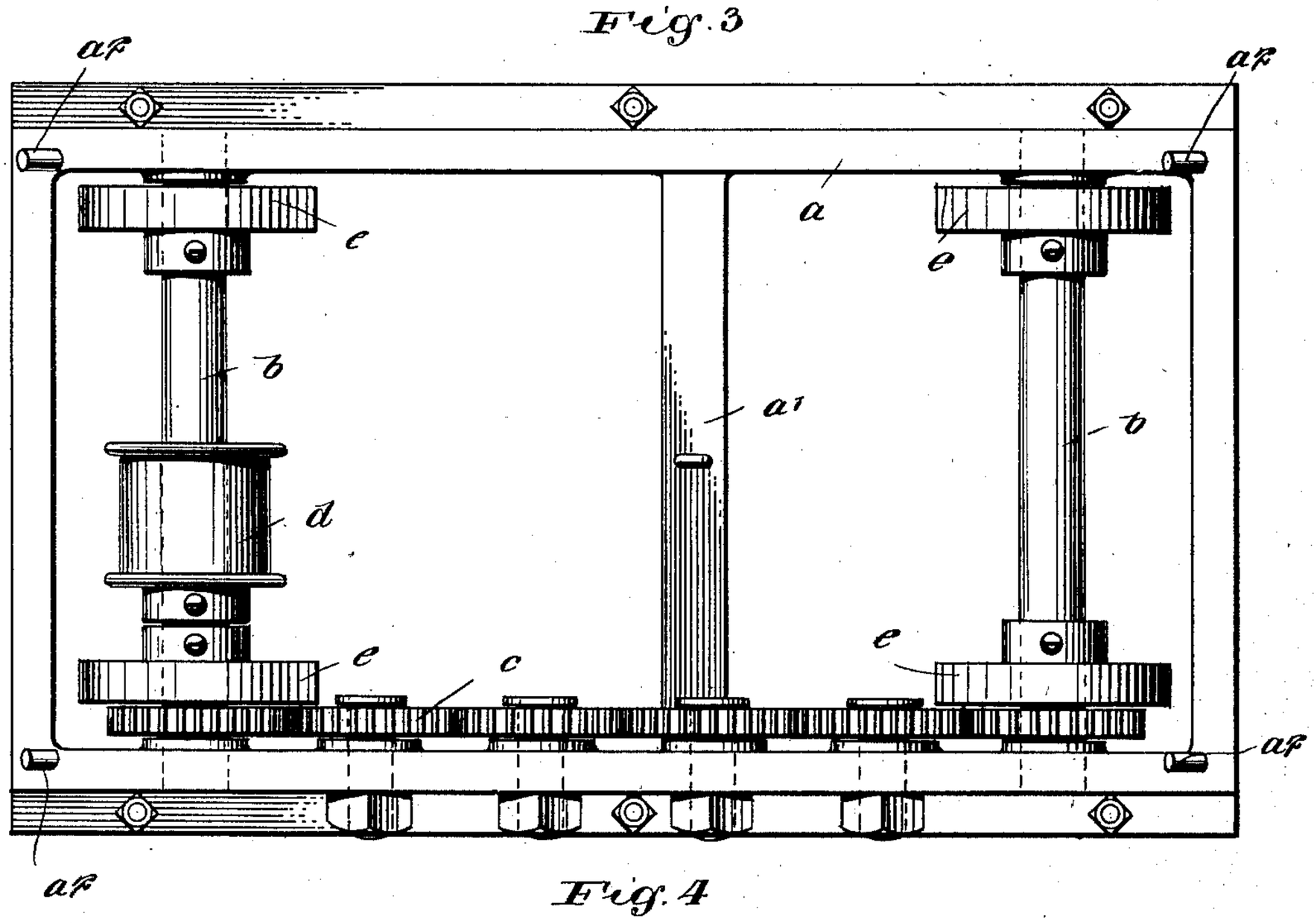
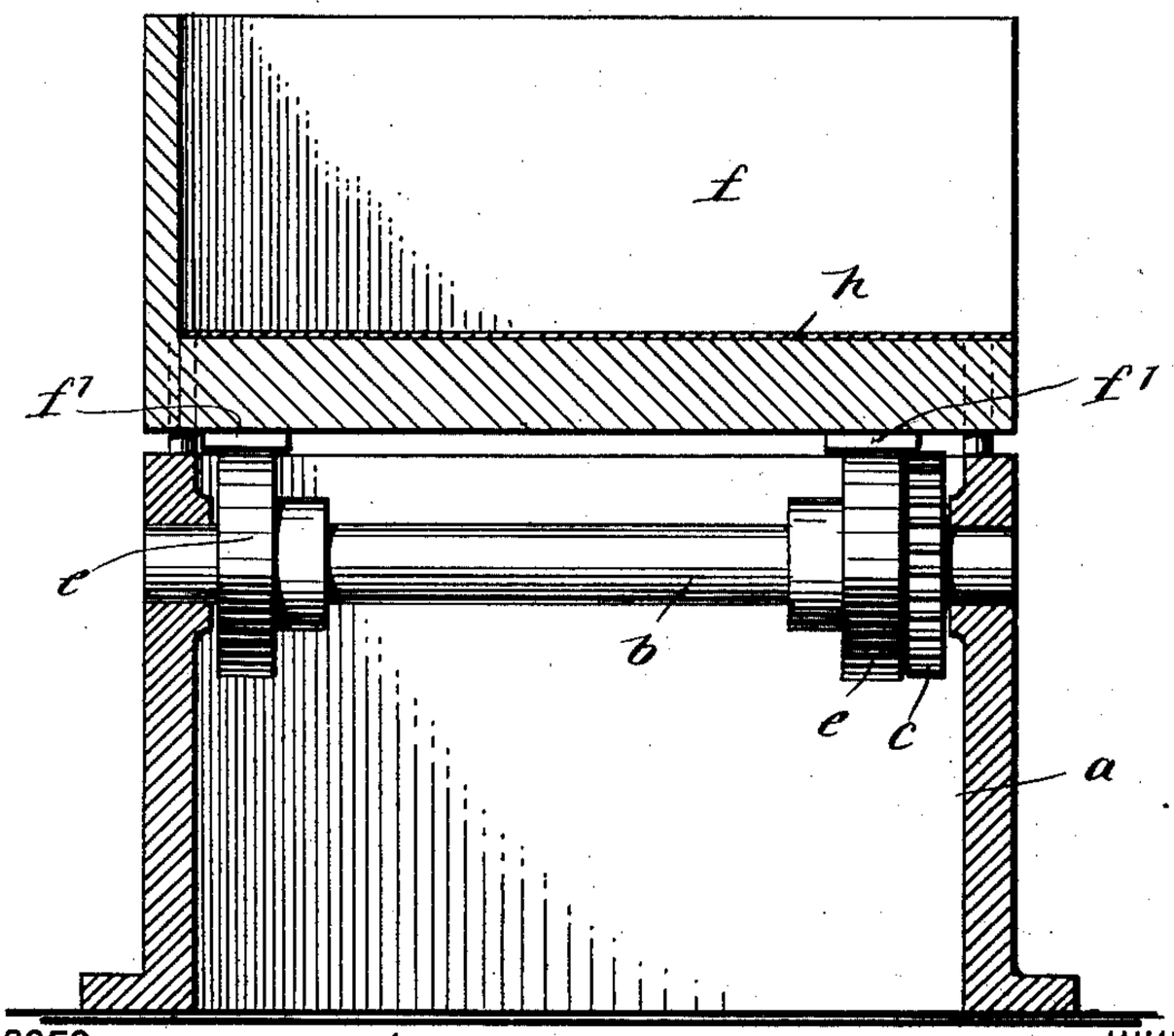


Fig. 4



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PAPER-JOGGER.

SPECIFICATION forming part of Letters Patent No. 703,271, dated June 24, 1902.

Application filed August 9, 1901. Serial No. 71,493. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ENGART JELF, a citizen of the United States, and a resident of Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and Improved Paper-Jogger, of which the following is a full, clear, and exact description.

This invention relates to a device for jogging or jolting superimposed sheets of paper so that they will be caused to assume positions in which their edges lie true with respect to each other, thus preparing the sheets for binding, cutting, or analogous purposes.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the invention. Fig. 2 is a plan view thereof. Fig. 3 is a plan view of the base, and Fig. 4 is a section on the line 4 4 of Fig. 1.

As best shown in Figs. 3 and 4, the base comprises a suitable casing *a*, in which are arranged two transverse rotary shafts *b*, connected together by a train of gearing *c* or by any other suitable means for causing them to move in unison, and one of said shafts has a pulley *d*, whereby it and the other shaft may be driven. *e* represents cams, which may be of any form desired, these cams being fastened on the shafts *b*, two cams being preferably provided for each shaft. The box or casing *a* has an intermediately-located cross-bar *a'*, the purpose of which will be hereinafter specified, and it is provided with upwardly-projecting pins a^2, arranged one at each of its four corners, these pins serving to carry the jogging or jolting tray in which the paper is placed. As shown in Fig. 1, the base has its top on an incline, and the shafts *b*, as well as the axes of the various elements of the train of gearing *c*, are arranged in a plane paralleling the upper edge of the casing. The pins a^2 stand perpendicular to its inclined upper edge.

The tray *f* sets on the base *a* and of course is inclined thereby, the tray having openings loosely receiving the pins a^2. The tray *f* has an open side and upper end, while the bottom, the lower end, and the other side are intact. Arranged on the bottom and against the inner faces of the standing side and end walls of the tray are small rods *g*, at one side of each of which is secured a tapering cleat *h*, the incline faces of which lead to the inner side of the rods. These rods and cleats serve the twofold functions of reducing the friction attending the movement of the sheets of paper and also of preventing the formation of partial vacuums under the paper, which will thus retard the proper settling of the various sheets. *i* indicates a retractile spring which serves normally to hold the tray in place, and *f'* indicates a number of wear-plates which bear, respectively, on the cams *e*.

In the operation of the invention the paper to be settled together is placed vertically in the tray *f* with certain of its edges on the rods and cleats on the bottom of the tray and on the rod and cleat in the end wall thereof, one side of the mass of paper lying against the cleats and rods on the side wall of the tray, while the operator may hold his hand against the other side of the mass of paper to keep it in place. The cams *e* are driven against the bottom of the tray. This jolts the tray violently up and down, the spring *i* causing the tray always to fall back quickly on the cams. This jolting motion properly disposes the sheets. The spring *i* is fastened to the bottom of the tray *f* and to the cross-bar *a'* of the base *a*. The paper being placed in the tray, as described above, engages the rods *g* and cleats *h* as contradistinguished from the plane walls and bottom of the tray, and these parts *g* and *h* thus reduce the friction attending the sliding movement of the paper and also prevent the paper adhering to the walls and bottom of the tray, which adherence would otherwise take place, owing to the formation of partial vacuums between the paper and the walls of the tray.

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

1. The combination of a base, a tray set inclinedly thereon, a cam mounted on the base and bearing under the tray and means for driving the cam for the purpose specified.

2. The combination of a base, a tray set inclinedly thereon, a cam mounted on the base and bearing under the tray and means for driving the cam for the purpose specified, and an inclined pin standing on the base and slidably engaged by the tray whereby to force the tray to move in an inclined path.

3. The combination of a base, a tray set inclinedly thereon, a cam mounted on the base and bearing under the tray and means for driving the cam for the purpose specified, and cleats fastened to the inner walls of the tray to be engaged by the edges and sides of the paper, whereby to prevent adherence between the paper and tray.

4. The combination of a base having an inclined top, a tray set on said top, a pin set on the top of the base perpendicular thereto and slidably engaged by the tray for the purpose explained, means for yieldingly holding the base against the tray, and a cam driven against the bottom of the tray to jar the latter.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM ENGART JELF.

Witnesses:
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J. S. POINDEXTER.