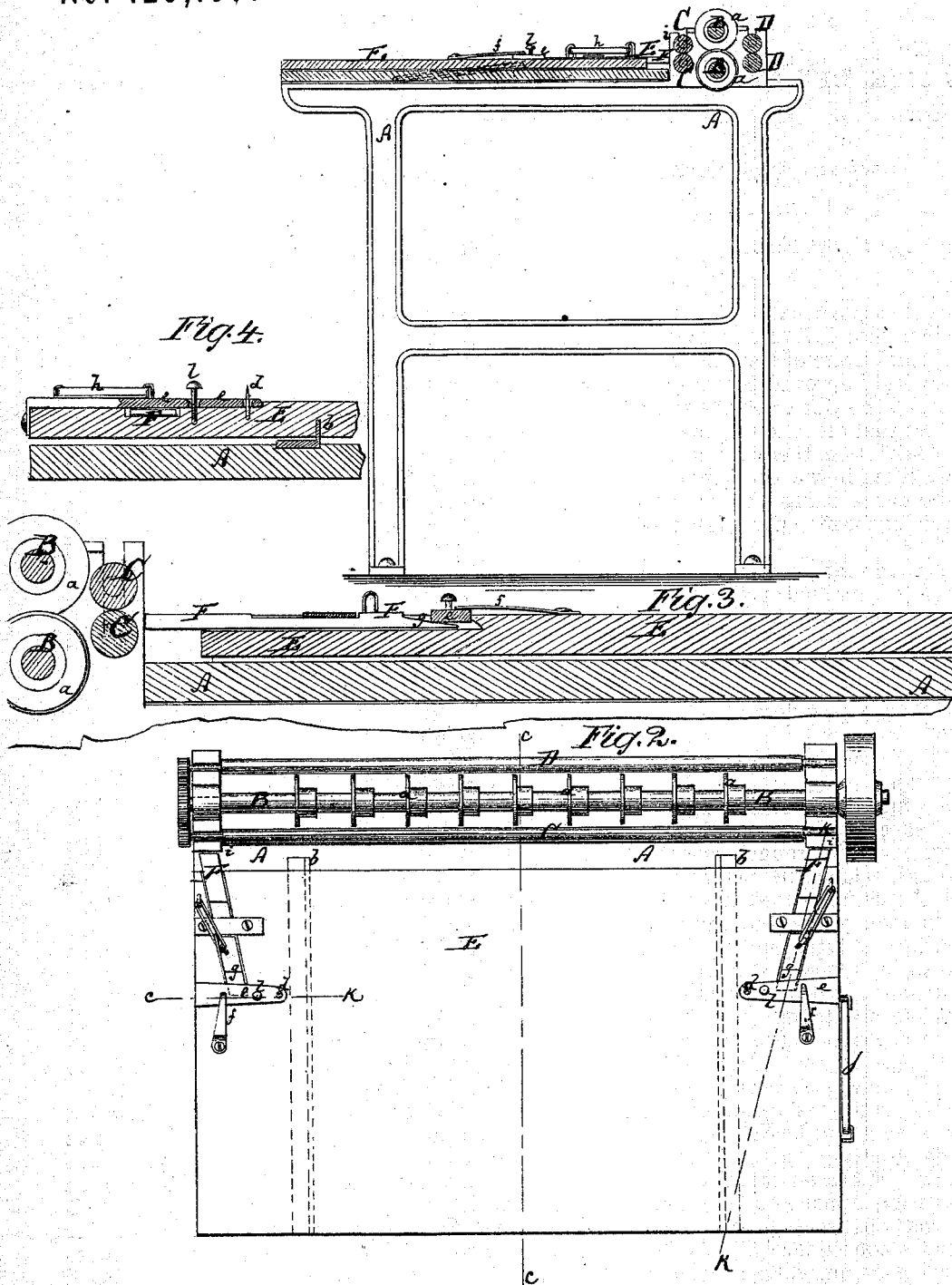


DUNDAS DICK. Paper Feeding Machine.

No. 123,157.

Patented Jan. 30, 1872.



Witnesses:
John Becker.
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UNITED STATES PATENT OFFICE.

DUNDAS DICK, OF NEW YORK, N. Y., ASSIGNOR TO VICTOR E. MAUGER, OF
SAME PLACE.

IMPROVEMENT IN PAPER-FEEDING MACHINES.

Specification forming part of Letters Patent No. 123,157, dated January 30, 1872.

To all whom it may concern:

Be it known that I, DUNDAS DICK, of the city, county, and State of New York, have invented a new and Improved Pointing Apparatus for Sheets to be Cut or Marked; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a vertical transverse section of my improved pointing-machine, taken on the plane of the line *c c*, Fig. 2. Fig. 2 is a plan or top view of the same. Fig. 3 is an oblique section of the same on an enlarged scale, the line *k k*, Fig. 2, indicating the plane of section. Fig. 4 is a detail section on the line *c k*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to new apparatus for "pointing" sheets fed to a cutting-machine; and consists in the arrangement of spring-plates through which the points work, the sheet to be cut being placed upon the points and held thereon while the table is being moved forward. At the end of this forward motion the spring-plates are raised by means of sliding wedges, so that the sheet is freed from the points and taken ahead by the feed-rollers of the machine. By this invention great exactness of feed to the cutters is obtained, which is an item of extreme importance in the cutting of playing-cards and also in the cutting of all sheets that have been pointed or marked before cutting, and even in the marking of sheets. When on cutting-machines no reliable pointing apparatus is provided the sheets are easily fed so as to be cut out of line, and the cards consequently spoiled. In the manufacture of playing-cards considerable loss is experienced from this cause, and will be prevented by the application of my invention.

A in the drawing represents the stationary frame of the cutting apparatus. B B are the cutting-rollers hung to the forward end of the frame and provided with a series of circular knives, *a a*, whereby sheets are cut into a suitable number of strips. C C are the feed-rollers, hung directly behind the cutters, for feed-

ing the sheets to the latter. D D are rollers hung directly in front of the cutters for carrying off the strips cut.

All the apparatus thus far described may be of other suitable construction or arrangement; and I do not confine myself to the connection of my invention with any special kind of cutting or marking apparatus.

E is the feed-table of the machine, movable on the frame A behind the feed-rollers C C, and by preference guided on fixed rails or tracks *b* or otherwise arranged to have a steady motion toward and away from the feed-rollers when thus moved by hand or other mechanism. From the face of the table E project two pointed pins, *d d*, one near each end. *ee* are spring-plates, made of wood or metal, and affixed to the table E. The pins *d* project through the perforated loose ends of the spring-plates *e*, as shown, and extend above the same, when the said spring-plates are held down by their own spring or the aid of additional springs *f*. F F are sliding-plates applied to the face of the table, so that their front ends project beyond the front of the table, as in Fig. 2. Their back ends are wedge-shaped and fit under the spring-plates *ee*, respectively, as is clearly shown in Fig. 3. When the slides F are pushed back in the table they carry the thicker parts of their wedges *g* under the plates *e* and raise the latter so as to bring their faces above, or at least flush with the points of the pins *d*. *h h* are springs of suitable kind which draw the slides F forward into the position shown in Fig. 2.

The sheet to be cut is in pointing provided with marks which indicate where it should be placed upon the pins *d*—that is to say, there are dots or other marks printed upon it—and the sheet, when placed on the table, is so adjusted that the pins *d* will be directly under such marks. The pins *d* are then caused to pierce the sheet at the designed places and hold it secure to the table, causing it to be fed in the desired exact position to the feed-rollers, and from them to the cutters. Thus, even if the front edge of the sheet is uneven or untrue, will it be properly fed to the cutters. The sheet having been applied to the feed-rollers is not necessarily any longer held by the pointers or pins *d*. Therefore the slides F, as soon as their front ends strike the posts

i i of the frame A, are pushed back to raise the plates *e* in the manner above stated, and to thereby detach the sheet from the pins, allowing it to be carried forward by the feed-rollers without further connection with the table. The latter can, by a spring, *j*, or otherwise, be drawn back when the sheet has been detached from it, and thereby relieves the ends of the slides F, which are drawn ahead again by their springs *h*. *l l* are buttons or guards, which prevent the plates *e* from being elevated too far.

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

The spring-plates *e f* and wedges F, combined with sliding-table E having pins *d*, arranged as described, and applied for the purpose set forth.

DUNDAS DICK.

Witnesses:

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