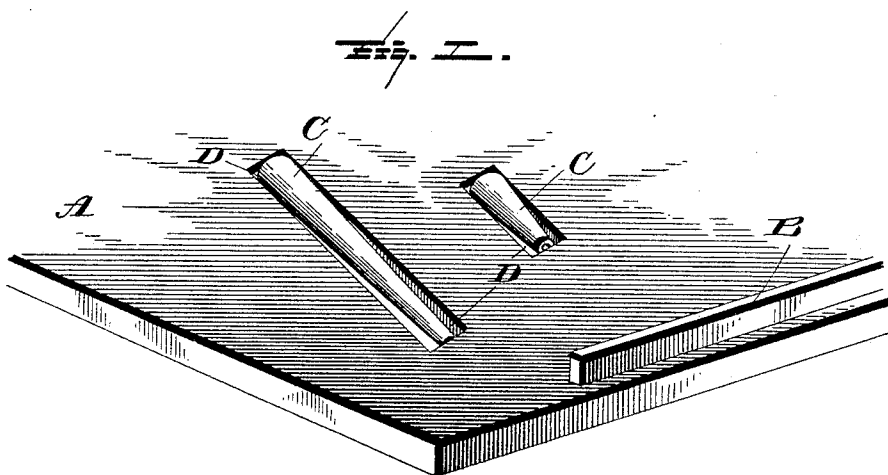
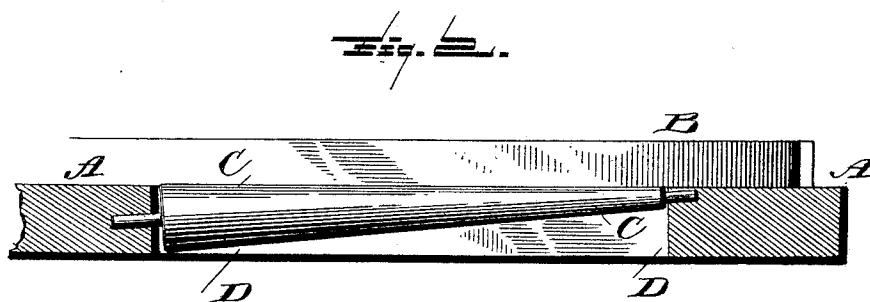


(No Model.)

F. K. CRANE & H. BRADSHAW.
APPARATUS FOR FEEDING PAPER.

No. 458,945.

Patented Sept. 1, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

FANNIE K. CRANE AND HARRY BRADSHAW, OF TOPEKA, KANSAS.

APPARATUS FOR FEEDING PAPER.

SPECIFICATION forming part of Letters Patent No. 458,945, dated September 1, 1891.

Application filed July 7, 1890. Serial No. 357,983. (No model.)

To all whom it may concern:

Be it known that we, FANNIE K. CRANE and HARRY BRADSHAW, citizens of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Apparatus for Feeding Paper, which may be used with ruling-machines, printing-presses, folding-machines, or with any other machine the operation of which requires that paper taken from a pile or heap shall be supplied in single sheets, of which the following is a specification.

This improvement consists in the arrangement and adaptation to and in connection with the ruling-machine, printing-press, folding-machine, or other machine of a conical roller or rollers set obliquely across the course in which the sheet of paper moves from the heap toward the point where it is to be ruled, printed, folded, or otherwise operated upon, which roller or rollers, in combination with a guide suitably adjusted, operate automatically to straighten the sheet.

The following is so full, clear, and exact a description of our said improvement as will enable others skilled in the art to which our invention appertains to make, construct, or use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of our invention in operative position as applied to the feed-board of a ruling-machine. Fig. 2 is a section of the same.

In the accompanying drawings, A designates a feed-board, which is provided at one side with a guide B, and which feed-board is also provided with rollers C C, which may be set at any desired angle to the line or the direction of the paper while being fed.

In practice we have found it advantageous to arrange them in a slot D and set them in obliquely, as shown in Fig. 1.

The rollers C C are provided with coverings, of rubber or sand-paper or cloth or roughened paper or any suitable material, to cause them to engage with the paper and crowd it over and straighten and adjust it. The rollers are made conical in outline, and they may be secured in any desired manner to operate against the paper for the purpose explained; and we do not limit ourselves to any special form, or arrangement, or number, or angle of direction of the roller or rollers. Nor do we limit ourselves to the use of our improvement on feed-boards, but contemplate the use of the same at any point in the operation of supplying single sheets of paper to any machine to which it may be adapted, that it shall be found desirable and practicable to introduce it substantially for the purposes set forth.

Having described the object, advantages, and uses of our device, what we believe to be new, and desire to secure by Letters Patent, and what we therefore claim, is—

1. In an apparatus for feeding paper, the combination of one or more conical rollers, a support therefor, and a guide adapted to automatically adjust the paper, substantially as described.

2. In an apparatus for feeding paper in single sheets to any machine in which paper is to be operated upon by printing, ruling, folding, or otherwise, a conical obliquely-arranged roller, in combination with a guide for straightening the paper, and a support for the roller and guide, as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

FANNIE K. CRANE.
HARRY BRADSHAW.

Witnesses:

GEO. W. CRANE,
MAY E. DAVIES.