C. H. STODDARD & E. D. NORTON.

Feeding Paper to Printing-Presses.

No. 140,962. Patented July 15, 1873.

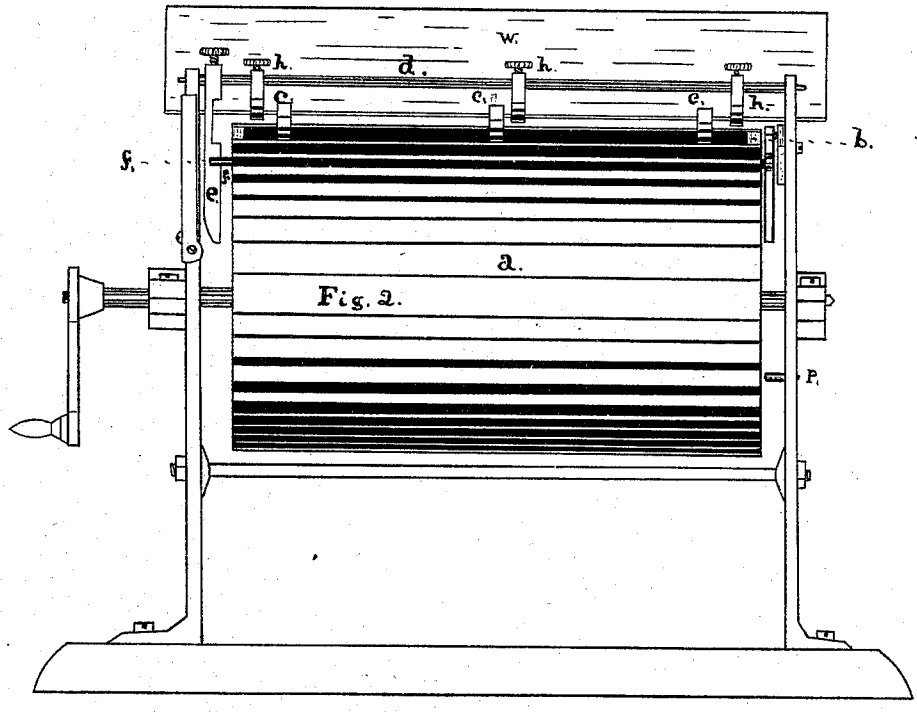

Fig. 2.

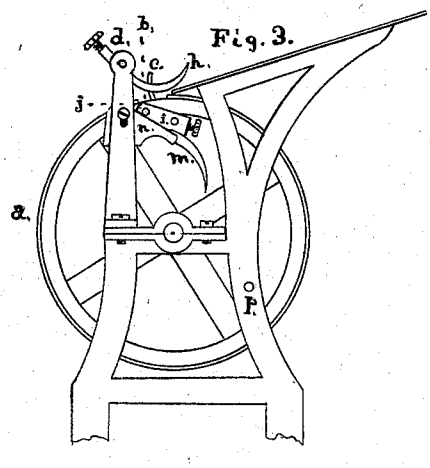

Fig. 3.

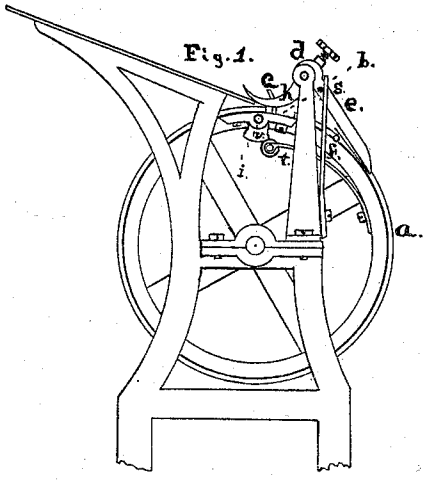

Fig. 1.

S. J. Parker.
A. Bennett.

Witnesses.

Clarence H. Stoddard.
Edward D. Norton.

Inventors.

UNITED STATES PATENT OFFICE.

CLARENCE H. STODDARD AND EDWARD D. NORTON, OF ITHACA, NEW YORK.

IMPROVEMENT IN FEEDING PAPER TO PRINTING-PRESSES.

Specification forming part of Letters Patent No. **140,962**, dated July 15, 1873; application filed February 24, 1873.

To all whom it may concern:

Be it known that we, CLARENCE H. STODDARD and EDWARD D. NORTON, both of Ithaca, Tompkins county, State of New York, have invented certain Improvements in Devices for Feeding Paper to Printing-Presses, of which the following is a specification:

Our invention consists in a particular arrangement of pivoted guiding-fingers with the feed-board of a cylinder-press, whereby a smooth and regular feed of the sheet is accomplished, as will be hereinafter more fully pointed out.

Figure 1 is an end view of a cylinder, on which the paper is printed, with our attachment. Fig. 2 is a side view, showing more clearly our placing-fingers. Fig. 3 is an end view opposite to Fig. 1, and showing our method of moving the gripers.

In Fig. 1, *a* is the impression-cylinder, on which the paper is printed, and *b* is the opening in the cylinder through which the gripers *c* rise and grasp the paper as it is fed to the cylinder. As ordinarily done it is subject to accidents, especially at the corners of the sheets, thus causing foldings and other errors. To correct this we suspend a shaft, *d*, over the place where the sheet is grasped. This shaft has an arm, *e*, which is moved by the pin *f* fast to the cylinder, and to this shaft we attach, by their set-screws, the fingers *h*, as many as are necessary, so that the gripers grasp the sheets more accurately than without them. The pin, stop, or cam *f* may be fast to other parts of the press, but is arranged to move the fingers down on the cylinder just before and while the gripers rise out of the cylinder and grasp the paper. The gripers *c* are upon a shaft, *i*, within the cylinder, whose ends *i* are seen in Figs. 1 and 3, and this shaft we move by the pin *j* on the arm *m*, Fig. 3, attached, just outside of the cylinder, to the end of the shaft *i*. The sliding of the pin up the incline *n*, Fig. 3, causes the gripers *c* to rise out of the cylinder and grasp the paper, and the pin *p* in the frame loosens the gripers and puts the arm *m* in place for the next sheet. As represented, this arrangement of the arm will not allow the cylinder to be reversed, but a slight modification of the end of the arm *m* will allow the cylinder to be reversed. In Fig. 1, the spring *s* is seen bearing on the arm *e* for retracting the fingers *h* after passing the pin *f*, and also the spring *t* for holding the gripers either as grasping or as relaxed by the cam *v*. The paper-platform *w* is represented, but most of the parts of the press are omitted.

The principle of the action of the gripers is well known, and the action of the fingers *h* will also be apparent from our description.

The further advantages and uses of our invention are apparent to those skilled in the art to which it appertains.

We are aware that weights have been used to press upon the sheet of paper to insure its remaining smooth, while and after the gripers seize it; also that a pivoted arm has been used for the same purpose; we do not, therefore, broadly claim weights or fingers, under which the paper is to drag, to insure its remaining smooth while and after the gripers seize it; but—

What we do claim is—

In combination with an impression-cylinder, *a*, having gripers *c*, the guiding-fingers *h* on a pivoted bar, *d*, having a pendulous lever, *e*, which is intermittingly vibrated by a stop, *f*, on the cylinder.

CLARENCE H. STODDARD.
EDWARD D. NORTON.

Witnesses:
SAMUEL J. PARKER,
A. BURRITT.