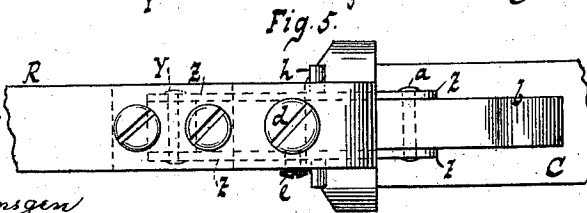
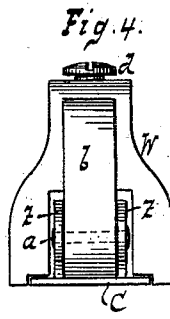
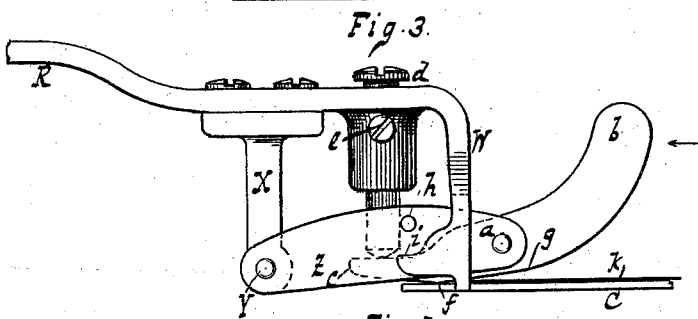
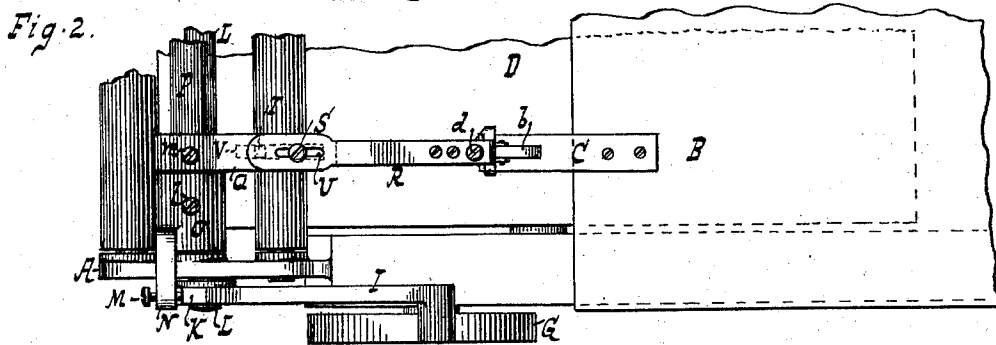
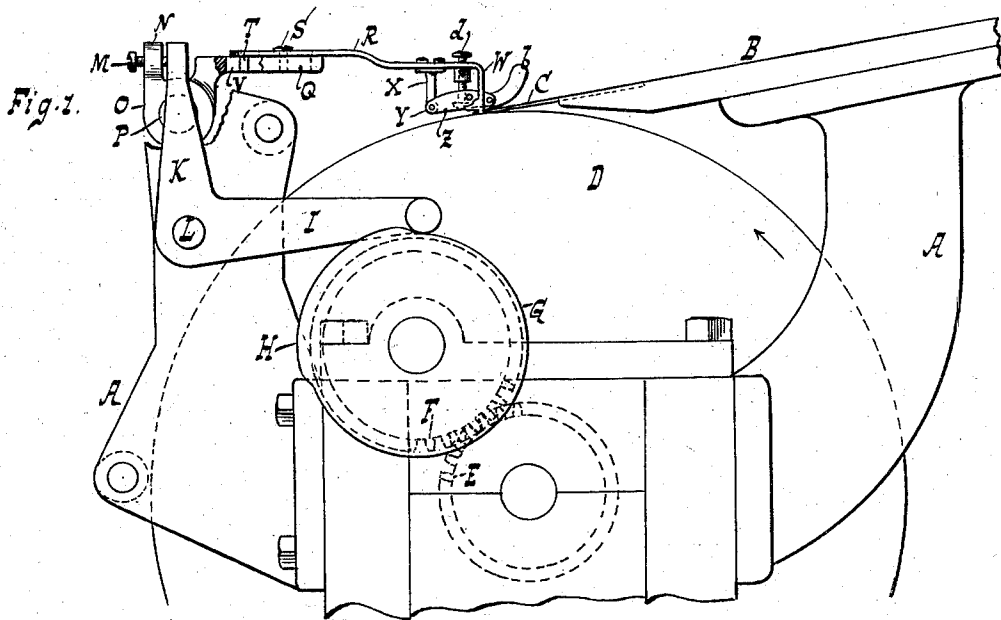


(No Model.)

G. P. FENNER.
SHEET GUIDE FOR PRINTING MACHINES.

No. 505,353.

Patented Sept. 19, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE P. FENNER, OF NEW LONDON, CONNECTICUT.

SHEET-GUIDE FOR PRINTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 505,353, dated September 19, 1893.

Application filed April 27, 1893. Serial No. 472,102. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. FENNER, a citizen of the United States, residing at New London, in the county of New London and State of Connecticut, have invented new and useful Improvements in Sheet-Guides for Printing-Machines, of which the following is a specification.

This invention relates to an improvement in sheet guides for printing machines and the object of the invention is to prevent derangement of the paper prior to its being taken by the grippers as set forth in the following specification and claims and illustrated in the annexed drawings in which—

Figure 1 is a side elevation of a printing press containing my invention. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a detail side elevation of a sheet stop. Fig. 4 is an end view of Fig. 3. Fig. 5 is a plan view of Fig. 3.

In the drawings the letter A indicates a frame or support having a feed board or table B provided with projecting strips or fingers C for supporting the leading edge of the sheet until taken by the grippers (not shown) of the impression cylinder D. A gear E suitably mounted as on the shaft of impression cylinder D imparts motion to gear F and cam disk G the projection or cam part H of which actuates a bell crank lever I K fulcrumed at L. The lever arm K acts on the screw or adjustable finger M on arm N extending from sleeve O adjustably secured to shaft P by screw L. The sections Q R forming the sheet stop are adjustably connected as by the screw S and pin T extending into slots U V so that the section R can be set for adjusting the end W of the sheet stop at the required point on strip C. The section Q is adjustably secured to shaft P by a screw m. The end W of the sheet stop is notched (Fig. 4) to straddle the strip C. A hanger or arm X on section R carries a joint or pivot Y for a gravitating link or links Z. The free end of the link Z carries a joint or pivot a for a pressure finger b in the notched end of the sheet stop. The finger b has a tail c on which presses a screw or adjustable stud d which latter when adjusted can be fixed by set screw e. The lever I K actuates the sheet stop so that its end W rises at proper moments to allow the sheet to be drawn along under said

end W but as the finger b is jointed to the free end of a gravitating link Z said finger will not rise with the end W but during the rising of the end W the finger b will rock from its point f to point g. The finger thus presses on the sheet while the latter is being drawn off by the grippers, said pressure however not being sufficient to interfere with the movement of the sheet. In case the sheet stop is thrown entirely back or out of action as for cleaning or repairing when the sheet stop is swung or held out of the way by hand, the lug h on link Z catching on the horn or projection i on the sheet stop end W as the latter is raised will raise the link Z and finger b with the end W. During the actuation of the sheet stop by the lever I K however the sheet stop end W rises high enough to allow a sheet of paper to pass under the end W but said end does not then rise high enough to bring its horn i against stud h or to raise the finger b off the strip C.

The operation is as follows: the parts being in the position shown in Fig. 3 a sheet k is pushed with its leading end against the sheet stop end W, the finger b being held elevated on its point f by the pressure of stud d on tail c so that said finger will leave the sheet free to butt against end W. The moment the end W rises to free the sheet the stud d rising with end W will free the tail c from pressure so that the finger b which is overbalanced will turn on its pivot a and rock on point f so as to drop its point g onto sheet k. Should the end W thus rise before the grippers have taken hold the finger b engaging the sheet at the moment the end W rises will prevent displacement of the sheet. The finger b remains in contact with the sheet while the latter is being drawn forward by the grippers but as noted said finger does not materially oppose the passage of the sheet.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a movable sheet-stop, of a gravitating link pivotally connected with the sheet-stop, and a rocking pressure finger pivoted to the gravitating link, substantially as described.

2. The combination with a movable sheet-stop, of a gravitating link pivotally connected at one end with the sheet-stop, a rocking

pressure finger pivoted intermediate its extremities to the opposite end of the link and having a tail piece, and an adjustable stud carried by the movable sheet-stop and bearing against the tail-piece of the pressure finger, substantially as described.

3. The combination with a feed board having a paper supporting strip projecting from the edge thereof, of a movable sheet-stop provided with a pendent arm or hanger, a gravitating link pivoted at one end to the arm or hanger, an overbalanced pressure finger pivoted to the opposite end of the link, and an adjustable device mounted on the sheet-stop and engaging the pressure finger to swing the latter on its pivotal attachment to the link, substantially as described.

4. The combination with a vertically movable sheet-stop, of a gravitating link pivotally connected at one end with the sheet-stop, a pressure finger pivotally attached intermediate its extremities to the opposite end of the gravitating link and having a tail-piece, and an adjustable screw carried by the sheet-stop and bearing against the tail-piece of the pressure finger, substantially as described.

5. The combination with a vertically movable sheet-stop, of a gravitating link pivotally connected at one end with the sheet-stop,

and provided with a lateral stud arranged in the path of a part of the sheet-stop, a pressure finger pivoted intermediate its extremities to the gravitating link and having a tail-piece, and a device mounted on the sheet-stop and bearing against the tail-piece of the pressure finger, substantially as described.

6. The combination with a vertically movable sheet-stop having a horn *z*, of a gravitating link pivotally connected at one end with the sheet-stop and having a lateral stud *h* arranged in the path of the horn, a pressure finger pivoted to the opposite end of the gravitating link, and a device mounted on the sheet-stop and engaging the pressure finger to swing the latter on its pivotal attachment to the link, substantially as described.

7. The combination with a movable sheet stop of a link jointed to the sheet stop and a finger jointed to the link, said link having a stud or support *h* adapted to be engaged by the sheet stop substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE P. FENNER.

Witnesses:

WILFRED D. WELLS,
WALTER E. SPICER.