No. 638,634. Patented Dec. 5, 1899.

C. G. HARRIS.

ATTACHMENT FOR FEED TABLES.

(Application filed Jan. 13, 1899. Renewed Nov. 4, 1899.)

(No Model.)

Fig. 1.

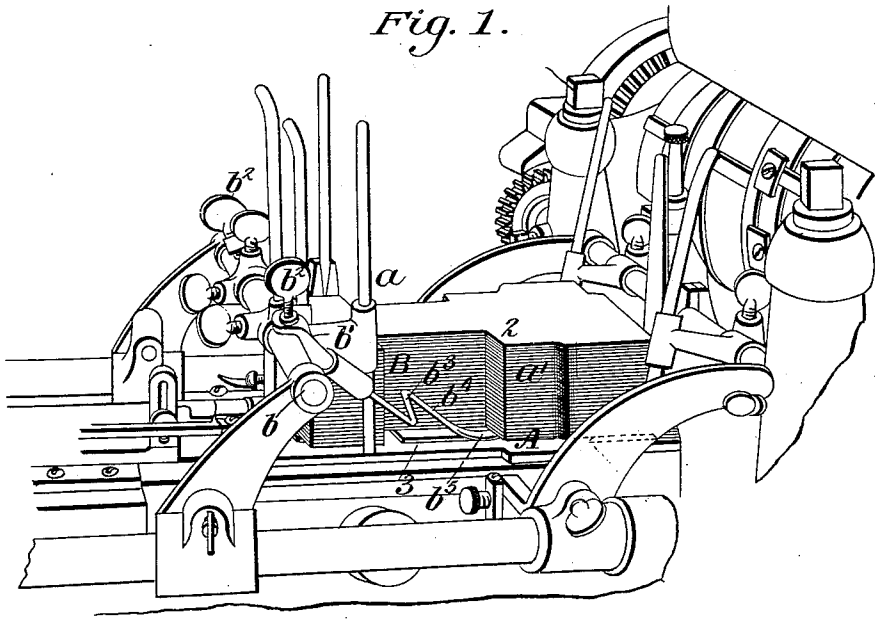


Fig. 2.

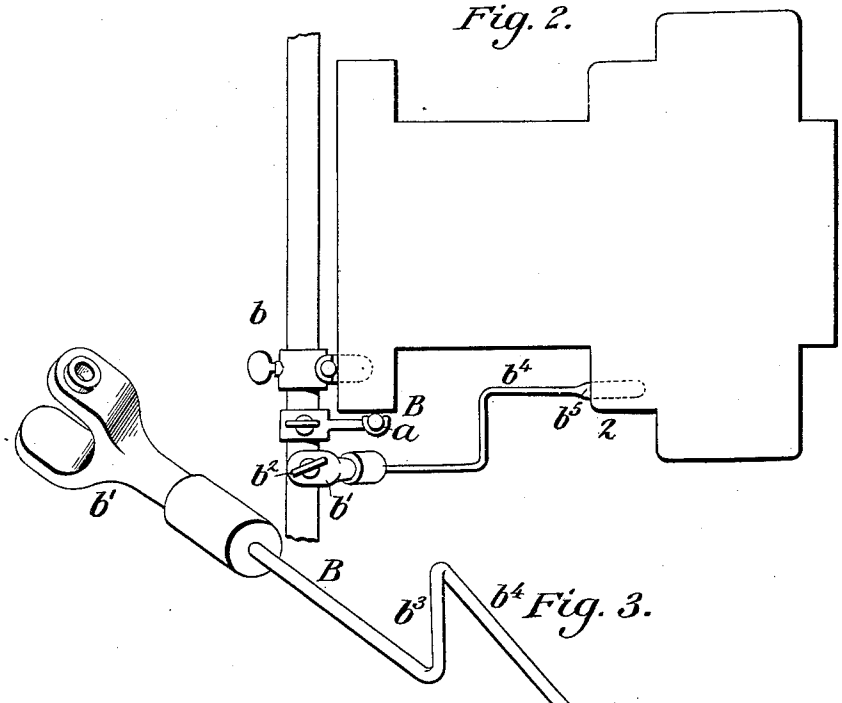


Fig. 3.

Witnesses.

Jno. Dominic

Chas. L. McKee.

Inventor.

Charles G. Harris

by Church & Church

Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES GRANT HARRIS, OF NILES, OHIO.

ATTACHMENT FOR FEED-TABLES.

SPECIFICATION forming part of Letters Patent No. 638,634, dated December 5, 1899.

Application filed January 13, 1899. Renewed November 4, 1899. Serial No. 735,843. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GRANT HARRIS, of Niles, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Attachments for Printing-Press Feed-Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In that class of printing-presses in which the feeding is effected mechanically from the top or bottom of a pile of the stock difficulty has heretofore been experienced in feeding blanks having lateral projections, such as box-blanks. This is occasioned by some of the projecting portions of a blank contacting when being fed forward with other projecting portions of the remaining blanks, resulting in the former being torn off. This seriously interferes with the feeding operation and also occasions considerable loss, since a blank thus damaged is rendered useless.

The object of this invention is to provide means for so guiding blanks as they are fed to a printing-press that the lateral projecting portions of such blanks will be prevented from catching against any of the forwardly-located lateral projections of the remaining blanks of the pile. This I accomplish by means of a guide-arm set at an angle at one side of the pile of stock and so arranged that as a blank is fed forward the arm will be between the opposite faces of the forwardly-located lateral projections of the remaining stock and the previously rearwardly located lateral projection of the blank that is being fed. In this way the lateral projections at the rear or outer end of a blank are prevented from engaging with the forward lateral projections of the stock across which the blank is caused to travel as it is being fed to a press. Two guide-arms are usually employed, one on each side of the pile.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective, showing a portion of a printing-press feed-table. Fig. 2 is a plan view. Fig. 3 is an enlarged view of one of the guides detached.

Referring to the drawings, A designates the feed-table of a printing-press, *a* the stock-hopper, and *a'* a pile of box-blanks positioned in said hopper. The hopper *a* is shown as composed of upright guides, which, like the feed-table itself, are after the form shown and described in Letters Patent No. 591,648, granted to me October 12, 1897.

B B designate the guide-arms, which are set at an angle and are mounted on a cross-rod *b* of the feed-table. Each arm has a socket-piece *b'*, which is held on cross-rod *b* by a set-screw b^2. The arm proper may be made from a rod or wire or any suitable medium. From its socket it extends downward and forward parallel with the side of the pile, and is then carried inward and upward, as at b^3, and is then again carried downward, as at b^4, again paralleling the side of the pile, and is then bent slightly downward and carried forward, as at b^5, terminating in an approximately horizontal portion. The horizontal portion or forward end of each arm is then extended beneath the forward lateral projections 2 of the blanks. In Fig. 1 I have shown the lowermost blank of the pile partly fed forward. It will be noticed that the rear lateral projection 3 of this blank as it is approaching the projections 2 of the remaining blanks is caused to engage with the bent portion b^5 of the guide-arm, and as the blank is moved farther forward to and beneath the projections 2 the projection 3 is held out of engagement with the latter and passes beneath the forward end of the guide-arm. In this way each blank is capable of being fed to a press without being damaged or torn by catching against any of the projections of the remaining blanks of the pile.

In the drawings I have shown the guide as applied to a pile the feeding from which is effected from the under side; but it is obvious that the guides can be employed with the same results when the feeding is from the top of the pile. When so used, the arms are positioned so that the outer ends thereof will bear against the upper faces of the projections 2. Hence as a blank is fed forward the lateral projections 3 will travel over the ends of the guide-arms and be prevented from engaging the projections 2. These guide-arms are of decided advantage when blanks of any

kind having a plurality of lateral projections are to be fed mechanically from the top or bottom of a pile of such blanks.

I claim as my invention—

1. The combination with a feed-table, of a guide located thereon designed to engage the lateral projections of the forward part of stock piled on such feed-table, and having an inclined portion near its outer end which intersects the line of travel of the lateral projections of the rearward part of such stock, as and for the purpose set forth.

2. The combination with a feed-table, of a guide consisting of an arm fixedly mounted on said feed-table and having a straight end and an inclined portion adjacent thereto, said inclined portion intersecting the line of feed, as set forth.

3. The combination with a feed-table and a hopper, of a guide consisting of a fixed arm having an inclined portion intersecting and paralleling the line of feed, substantially as set forth.

4. The combination with a feed-table and a hopper, of a guide consisting of a fixed inclined arm having an inwardly-extended portion and an inclined portion intersecting the line of feed, substantially as set forth.

5. The combination with a feed-table having a cross-rod and a hopper, of guide-arms mounted on said cross-rod and extended at an angle thereto, said arms being extended inwardly toward said hopper and having inclined portions and straight ends, as and for the purpose set forth.

6. The combination with a feed-table having a stock-hopper, of angularly-disposed guide-arms mounted on said feed-table on opposite sides of said hopper and having inclined portions extended across and paralleling the line of travel of the stock, as and for the purpose set forth.

7. The combination with a feed-table having a stock-hopper, of a fixed guide extended in the line of travel and having an inclined portion intersecting the feed-line and terminating on a line approximately parallel with such feed-line, substantially as set forth.

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

CHARLES GRANT HARRIS.

Witnesses:
E. B. ROWE,
ZOE HARTSHONE.