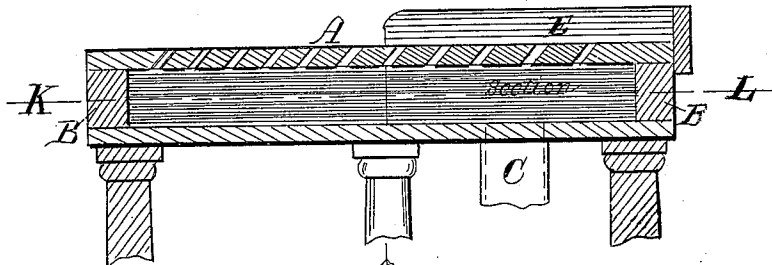


Gray & Turner, Paper Feeder.

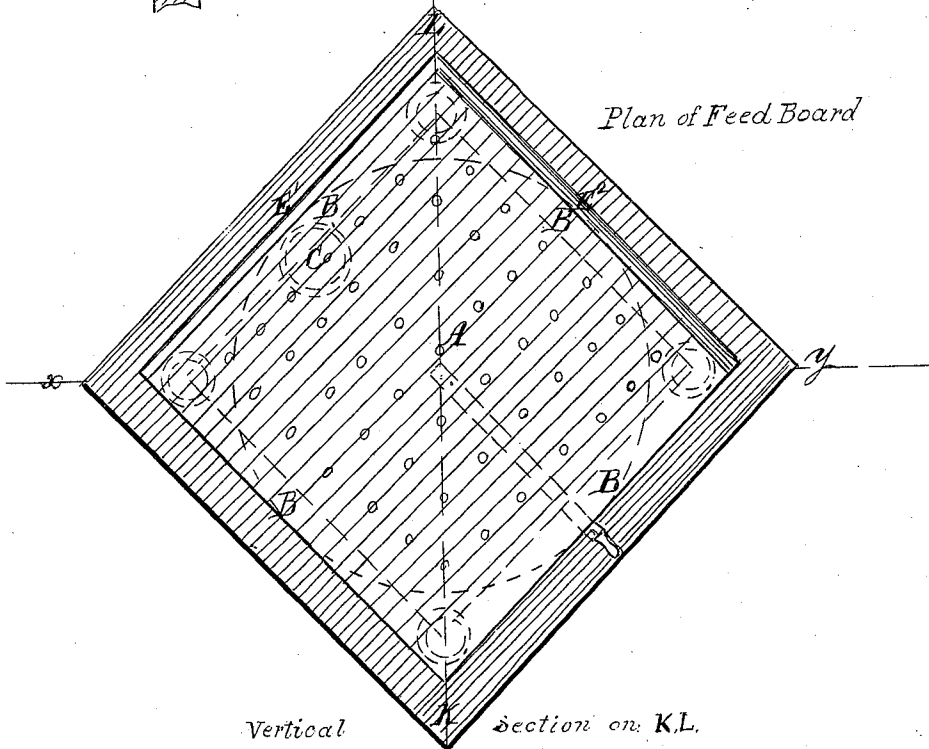
No. 98,253.

Patented Dec. 28. 1869.

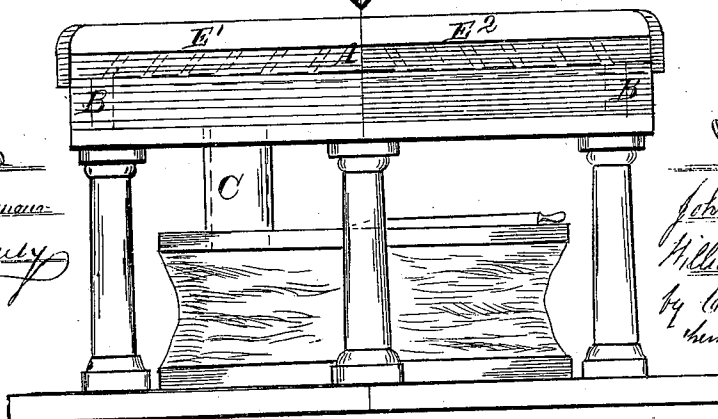
Vertical Section on x,y.



Plan of Feed Board



Vertical Section on K,L.



Witness
A. L. Gorman
Apprentice

Witness
John H. Gray
William B. Turner
by Chas. H. Woods
their attorney in fact

UNITED STATES PATENT OFFICE.

JOHN H. GRAY AND WILLIAM B. TURNER, OF ST. ANTHONY, MINNESOTA.

IMPROVEMENT IN PAPER-FEEDERS.

Specification forming part of Letters Patent No. 98,253, dated December 28, 1869.

To all whom it may concern:

Be it known that we, JOHN H. GRAY and WILLIAM B. TURNER, of St. Anthony, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in the Feed Apparatus of Printing-Presses, of which the following is a full and exact description, reference being made to the accompanying drawings and letters of reference marked thereon, which make a part of this specification.

The design of our invention is to provide an automatic and more perfect adjustment, against the nippers and guides, of each sheet of paper as it is laid upon the feed-board to be drawn into the press.

To enable others to make and use our invention, we will describe its construction and operation.

A represents in sectional and top views the feed-board of the press, beneath the surface of which is a shallow air-chamber, the sides of which are shown at B B. This chamber is supplied with air, through blast-pipe C, by means of an air-pump, bellows, or fan, which is to be attached and operated as shall be most convenient with reference to other parts of the machinery, no particular mode of attaching the same being claimed in this specification,

the supply of air being regulated according to the size and weight of the paper. The feed-board itself is perforated with small air-holes reaching into the chamber, and all tending obliquely through the board in the direction of the guides E' E², E' showing the position of the nippers by which the sheet is picked up and drawn into the press, and which act also as guides for the foremost edge of the sheet.

By whatever means the sheet is laid upon the board, its adjustment evenly against the nippers and guides on the two sides E' E² will be instantly effected by the blast, composed of fine air-currents from the chamber B, coming through the perforated board, and striking with oblique force the under side of the sheet.

We claim as our invention—

The feed-board A, obliquely perforated, and connected with chamber B, out of which, by means of a pump or other pneumatic apparatus, air-currents may be driven through such oblique perforations in direction of the guides E' E², substantially as and for the purpose described.

JOHN H. GRAY.
WILLIAM B. TURNER.

Witnesses:

WM. CHENEY,
GEO. H. RUST.