

UNITED STATES PATENT OFFICE.

GEO. GARY AND SAML. P. GARY, OF OSHKOSH, WISCONSIN, ASSIGNORS TO THEMSELVES AND JOS. E. GARY, OF CHICAGO, ILLINOIS.

PRINTING-PRESS.

Specification of Letters Patent No. 31,573, dated February 26, 1861.

To all whom it may concern:

Be it known that we, George Gary and Samuel P. Gary, both of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and Improved Printing-Press; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line x, x, Fig. 2. Fig. 2, a plan or top view of the same.

Similar letters of reference indicate cor-

15 responding parts in the two figures.

The object of this invention is to obtain a printing press which will be simple and cheap in construction, capable of being worked rapidly, and operated with but a moderate expenditure of power.

To enable those skilled in the art to fully understand and construct our invention we

will proceed to describe it.

A, represents a rectangular frame which may be constructed in any proper way to support the working parts of the press, and B, is a horizontal bed which is placed in the frame A, and on which the "form" C, is placed. The bed B, is stationary and sequence of the press of the press, and the frame in any proper way.

quite light so that as it is moved back and forth its momentum will not be great and consequently concussions and wear and tear avoided. Those presses which are provided with a reciprocating form bed are attended with the above named difficulties for the reason that the form bed is necessarily

D, is a vertical frame composed of two uprights a, a, and traverse bars b, b, the latter connecting the uprights at their upper and lower ends. In this frame D, there are placed two horizontal cylinders E, F, one of which E, is above and the other F, below the bed B. Each upright a, of the frame D, has a horizontal bar G, attached to it, and these bars rest on segments H, H, which are attached to the ends of a rock shaft I, at the lower part of the frame A. The ends of the segments H, are connected by straps J,

K, is a blanket, one end of which is attached to the form bed B, as shown at c. This blanket K, passes around the cylinder E, around rollers L, M, N, O, in the frame A, and is attached to frame A, as shown at d. P, P, are tapes, which are attached at one end to a crosspiece Q, on the framing, and pass around a roller R, in the upper part of

pass around a roller R, in the upper part of the frame D, and thence around the cylinder E, and are attached to the bed B, as

shown at e. The tapes P, P, pass around the cylinder E, on the outer side of the 55 blanket K, and near each edge of it.

To one of the segments H, an arm or lever

S, is attached.

The operation is as follows: The frame D, has a reciprocating motion given it by mov- 60 ing the arm or lever S, back and forth. The paper is fed to the tapes P, P, over the cylinder E, and the sheets are carried by the blanket and tapes over the form C, the rollers E, F, giving the impression. The 65 roller E, passes over the form and then back and the printed sheet is discharged over roller L.

The press may be provided with any suitable fly for properly disposing the dis-70 charged sheets, and the tapes P, P, or the blanket K, may be provided with nippers to grasp the sheets at the proper points.

By this very simple arrangement an efficient and rapidly working printing press is 75 obtained. The frame D, may be constructed quite light so that as it is moved back and forth its momentum will not be great and consequently concussions and wear and tear avoided. Those presses which are provided 80 with a reciprocating form bed are attended with the above named difficulties for the reason that the form bed is necessarily heavy and its rapid movement would soon rack and strain the press and disarrange its 85 working parts.

The manner of operating the frame D, is exceedingly simple and is attended with but little friction, while the blanket and tapes afford an inexpensive and efficient means 90 for carrying the sheets to and from the "form" C.

Having thus described our invention what we claim as new and desire to secure by Letters Patent, is—

The combination of the pressure roller F and reciprocating frame D, with the impression cylinder E and type bed B, in the manner substantially as herein shown and described.

GEORGE GARY. SAMUEL P. GARY.

Witnesses:

EDWIN JOHNSON, L. P. HARVEY.