

J.G. Northrup.

Printing Press

Fig. 1. Patented Jun. 12. 1855.

N^o 13069.

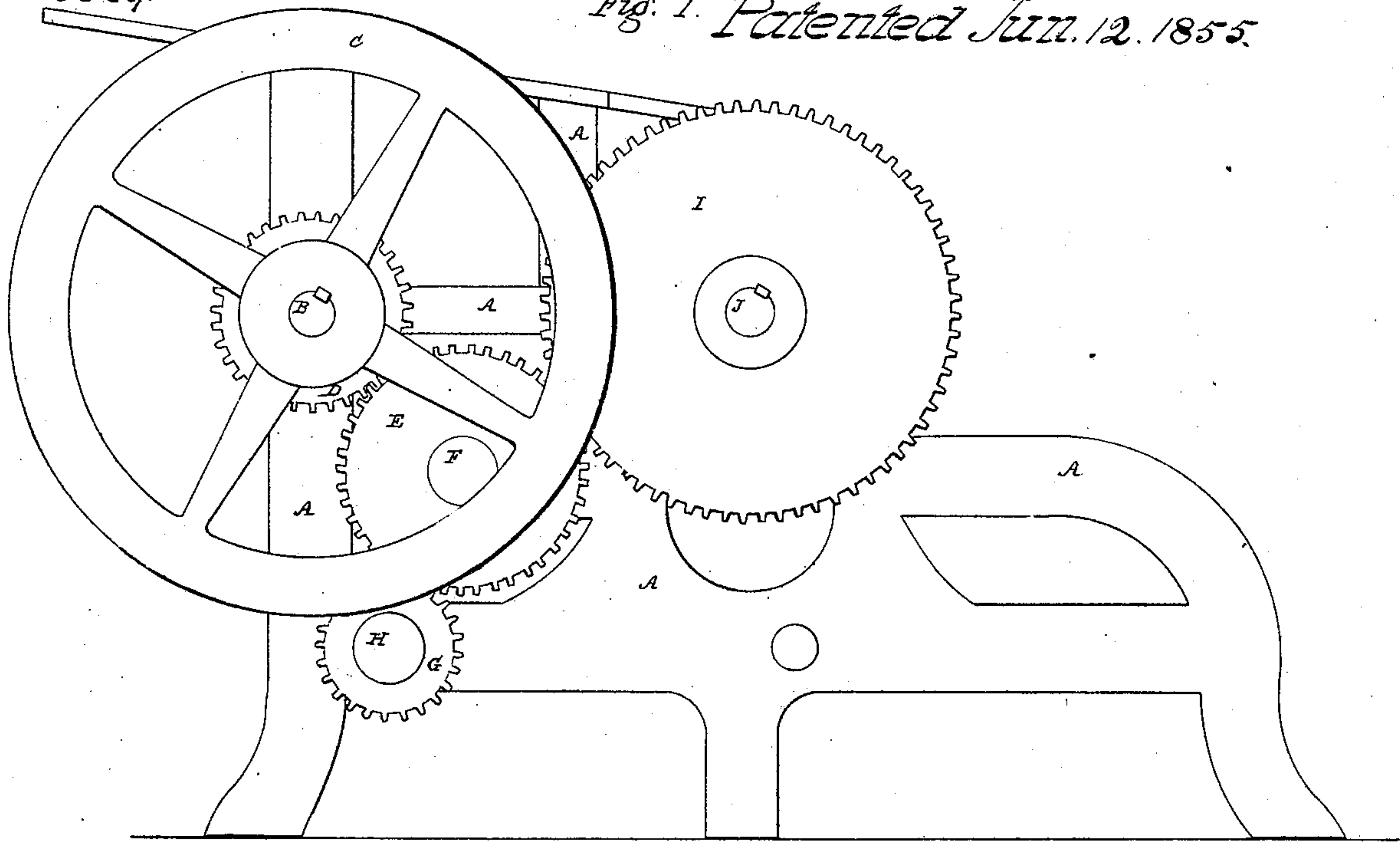
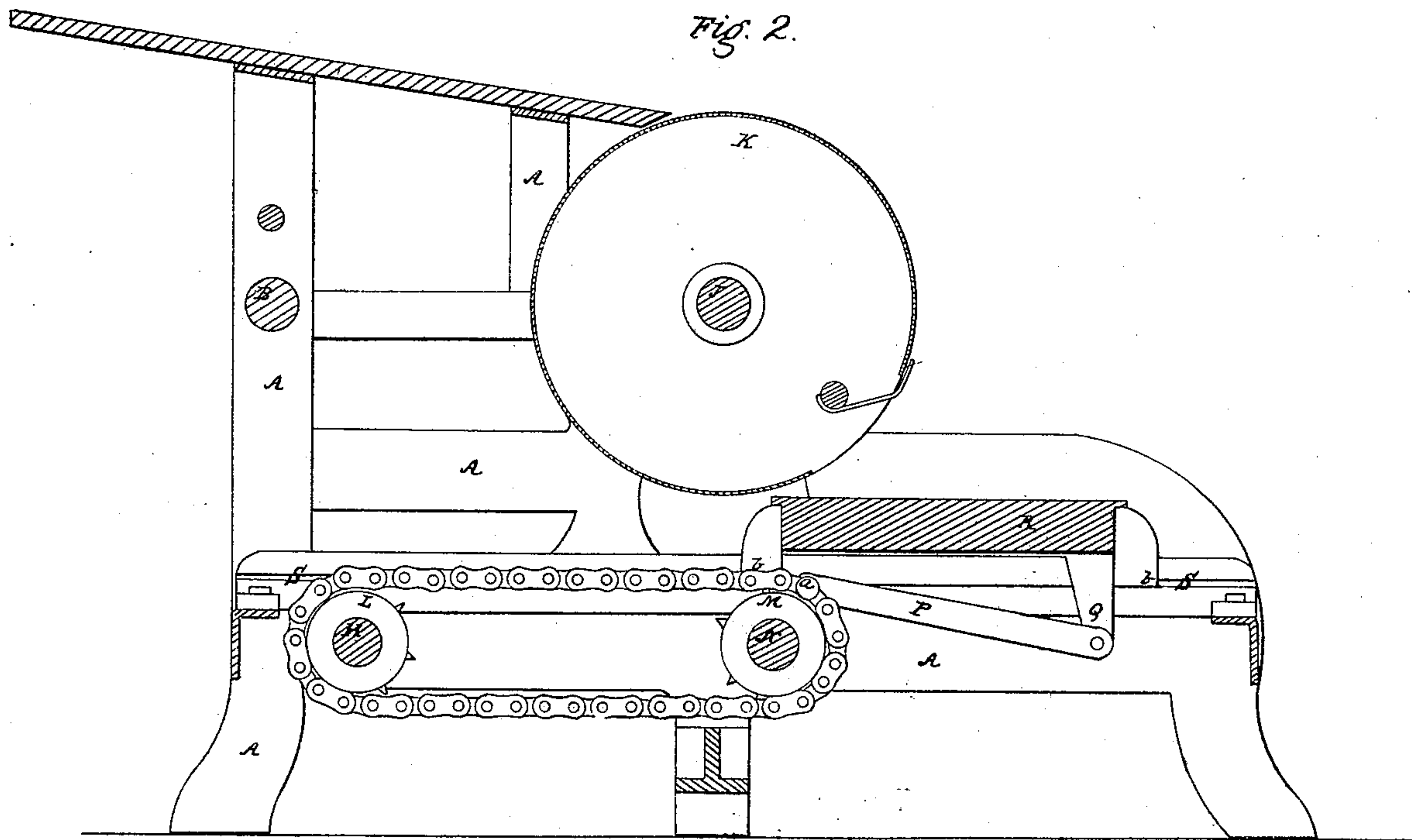


Fig. 2.



UNITED STATES PATENT OFFICE.

JOEL G. NORTHRUP, OF SYRACUSE, NEW YORK, ASSIGNOR TO JAS. D. MATHER.

PRINTING-PRESS.

Specification of Letters Patent No. 13,069, dated June 12, 1855.

To all whom it may concern:

Be it known that I, JOEL G. NORTHRUP, of Syracuse, in the county of Onondaga and State of New York, have invented certain
5 new and useful Improvements in Printing-Presses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part
10 thereof, in which—

Figure 1 represents a side elevation of the press, Fig. 2, represents a central longitudinal and vertical section through the same.

Similar letters in both the figures denote
15 like parts.

The nature of my invention relates to the manner of working the bed, by means of an endless chain, to which, and to the bed, is connected a rod or pitman, by wrist pins,
20 for the purpose of producing an elongated crank motion.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the
25 drawings.

A, represents the frame of the press, in proper bearings in which is placed the shaft B, on which the balance wheel C, is placed, and inside of said balance wheel, on the
30 shaft B, is a gear wheel D, which gives motion to another gear wheel E, on a short shaft or wrist F, attached to the frame. The gear wheel E, meshes with, and gives motion to the small wheel G, on the shaft
35 H, and to the large cogged wheel I, on the shaft J, which shaft J, carries the paper cylinder K. The shaft H, extends about half way across the press, and has upon its inner end, a chain pulley or wheel L, around
40 which, and around a similar chain pulley or wheel M, on the shaft N, passes an endless chain O, the teeth on the chain wheels taking into the links of the chain, to prevent any possibility of slipping. To a wrist
45 pin *a* on the chain O, is attached one end

of a connecting rod P, the other end of said rod, being similarly connected, to a piece Q, connected with, and projecting below the bed R, of the press to about aline with the centers of the chain wheels L, M. 50 By this arrangement an elongated crank motion is produced, which carries the bed the required distance back and forth on its ways, without the inconvenience of the long crank in getting it up. 55

The bed R, has guides *b* underneath it, which move in the grooves cut in the rails S, and thus direct its motion.

The cylinder K, is here represented of such a size, and so geared as to make one 60 revolution at each impression from the bed. It may of course be made smaller and turn twice at each impression, without changing the general character of the press.

The inking and flying apparatus may be 65 of any of the ordinary well known kinds, and being no part of my invention, are not represented.

Having thus fully described the nature of my invention, what I claim therein as new 70 and desire to secure by Letters Patent is—

The manner by which I give motion to the bed of a printing press, viz, by means of a vibrating connecting-rod, one end of which is attached by a studpin or wrist, to a stand, 75 that projects from the lower side of the bed, the other end being connected by a similar wrist to an endless chain, which passes around two wheels, which revolve, thus producing an elongated crank motion. I do not 80 claim the application of a chain for this purpose new, but I do claim the manner of attaching, combining and communicating its motion to the bed substantially as described.

JOEL G. NORTHRUP.

Witnesses:

REED BRADLEY,

CHS. P. WANNELL.