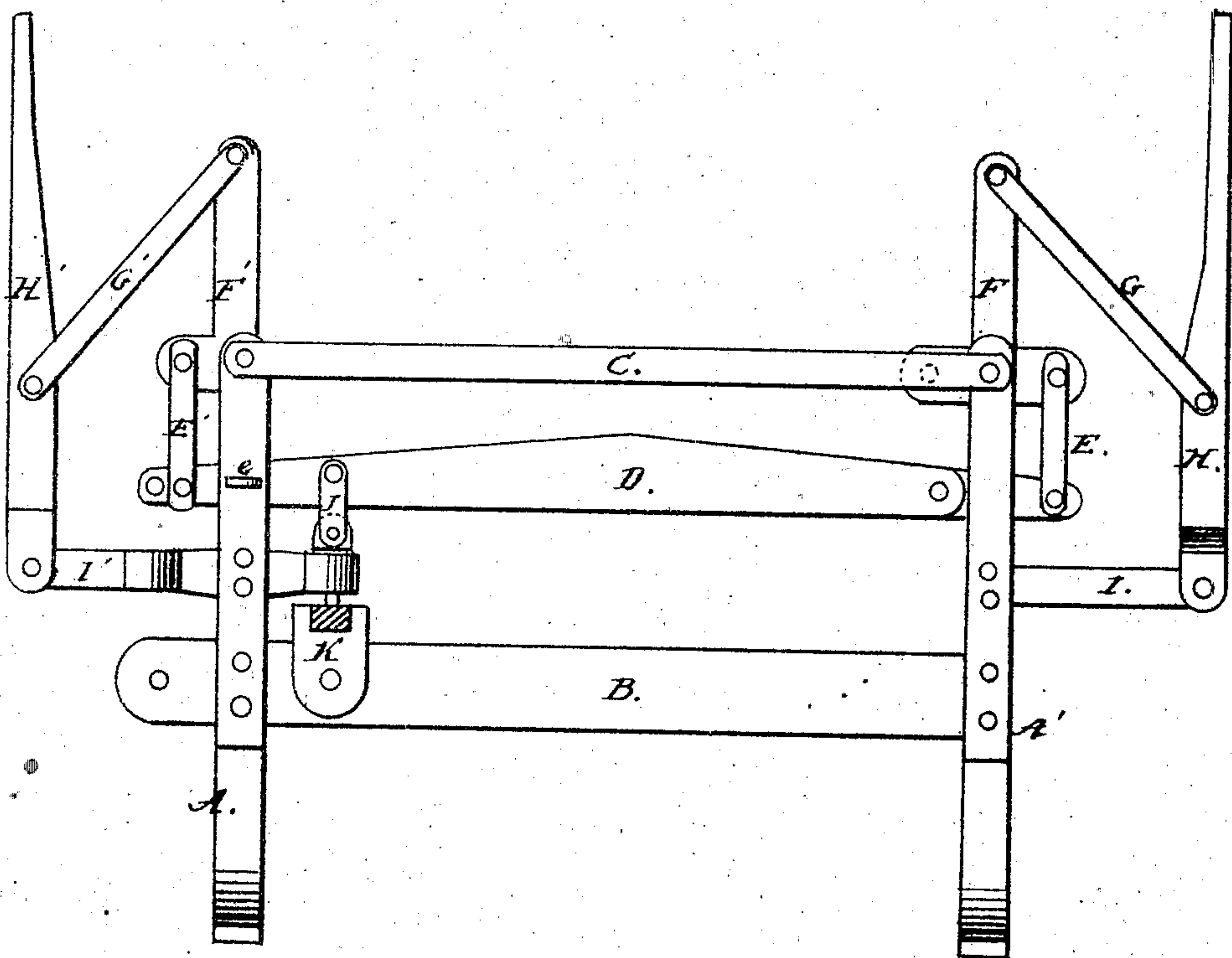


*J. Lamplugh,
Punching Appr.*

N^o 74,700.

Patented Feb. 18. 1868.



*Attest;
R. A. Grohman
Attest*

*Inventor;
J. Lamplugh
by
Alexander C. Warner
Atty*

United States Patent Office.

ISAAC LAMPLUGH, OF PEORIA, ILLINOIS.

Letters Patent No. 74,700, dated February 18, 1868.

IMPROVED PUNCHING-APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC LAMPLUGH, of Peoria city, in the county of Peoria, and in the State of Illinois, have invented certain new and useful Improvements in Punches; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A A' represent the end-pieces of the frame of this punch. There are two of these end-pieces at each end of the frame, placed close together, so as to embrace between them the bar B and the levers F F'. These bars are spread or separated at their lower ends so as to form four legs for the frame to sit upon. C represents a cross-bar, connecting the bars A A' together at their upper ends. F represents an elbow-lever, which is pivoted at its elbow between the end-pieces A'. A connecting bar, E, connects one arm of lever F to the punch-lever D, as seen, being pivoted to both. G represents a bar, which connects the other arm of lever F to a lever, H. The lower end of lever H is pivoted to an arm, I, which projects from the frame. Two ears, J, are formed upon or secured to the lever D, and between said ears the punch is secured. K represents the die, which is secured directly under the punch upon the bar B. A pin, e, passes through the end-pieces A, and through lever D, at the point where it passes between them, and forms a fulcrum for said lever. F', G', H', I', and E' represent parts which correspond with those of like letters just described, but are situated and secured to the opposite end of the frame. In order to move the punch by lever H' it is necessary to withdraw the pin e, and then the fulcrum of lever D changes to its other end. It will be readily seen that much more power is gained by the use of lever K than by the use of lever H', and consequently, when I wish to punch an article requiring but little power on the lever, I use the lever H', but in punching holes where a great deal of power is required, I use the lever H.

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

The improved punching-apparatus, consisting of the several devices, constructed, combined, and arranged in the manner and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 2d day of August, 1867.

ISAAC LAMPLUGH.

Witnesses:

A. N. MARR,
W. B. HOSFORD.