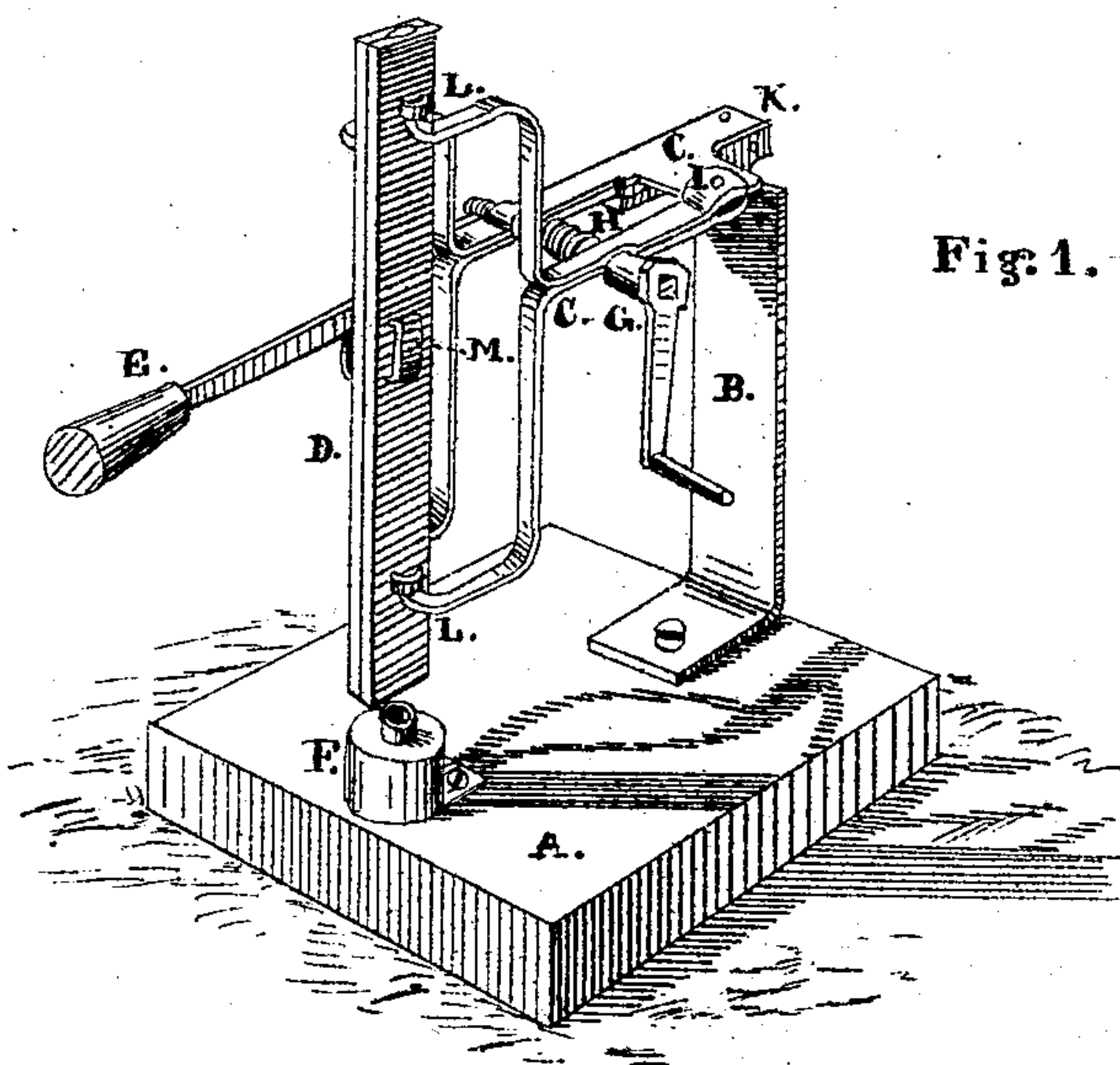


**J. I. STURGIS.**

## Printers' Lead Casting-Machines.

No. 135,384.

Patented Jan. 28, 1873.



**Fig. 1.**

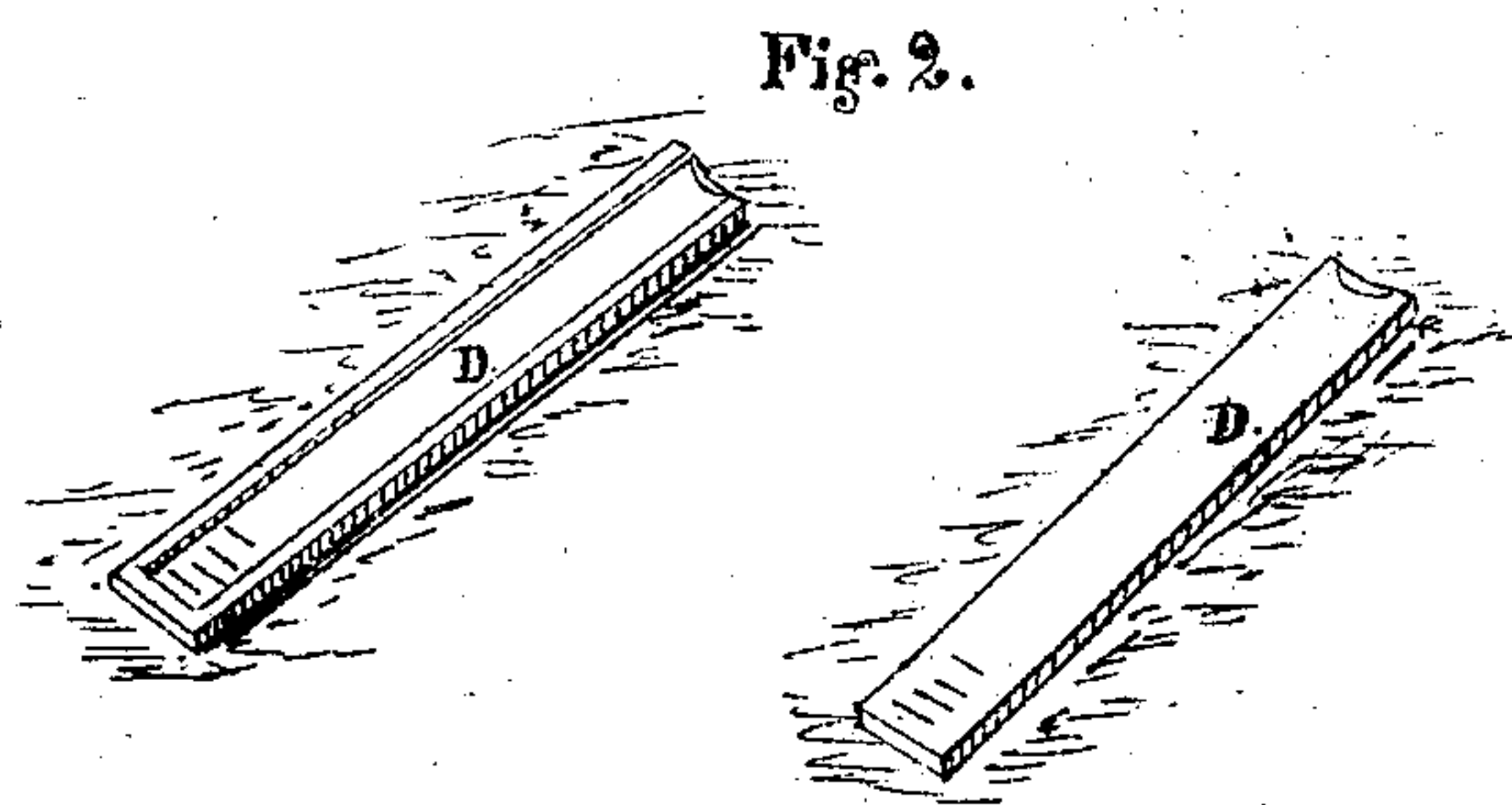


Fig. 2.

Witnesses:

J. J. Smith  
E. J. Smith.

*Inventor:*

John P. Sturges

# UNITED STATES PATENT OFFICE.

JOHN I. STURGIS, OF MILWAUKEE, WISCONSIN.

## IMPROVEMENT IN PRINTERS' LEAD-CASTING MACHINES.

Specification forming part of Letters Patent No. 135,384, dated January 28, 1873.

*To all whom it may concern:*

Be it known that I, JOHN I. STURGIS, of Milwaukee, in the county of Milwaukee and in the State of Wisconsin, have invented certain Improvements in Printers' Lead-Casting Machine, of which the following is a specification:

### *Nature and Object of the Invention.*

My invention is a machine for casting leads for printers. The way that leads are cast now is by holding the molds in the hands, and it is oftentimes the case that the leads cast in this way are uneven in thickness, and sometimes the metal will not run down to the bottom of the molds; but in this way the molds are held securely, and the lamp under the lower end of the mold heats it so that the metal flows freely to the bottom, and the leads are even in thickness.

### *Description of the Drawing forming part of this Specification.*

Figure 1 is a perspective view of the machine, and Fig. 2 are the molds.

A is the base on which the machine stands; B, a standard which supports the machine; C, the arms, which hold the molds; D, the molds; E, a lever secured to the side of the machine to give the machine a sudden jerk, which is sometimes necessary in casting thin leads; F, lamp under the lower end of the molds; G, crank and shaft which screws the arms together which hold the molds; H, spring on

shaft G, to press the arms apart to open the molds; I, joints of one of the arms when jointed onto the other arm, so that when screw-shaft G is unscrewed the arm shall swing off; K, joint at the head of standard B, joining the arms to the standard-head, so that the molds may be lifted up.

The operation of this machine is, that the molds are hung on the arm by projection L on the sides of the molds, and the crank-shaft turns up so that the end of the shaft, which is made with a screw, shall turn into the arm and bring the two arms together and hold the molds, as shown, Fig. 1. The lamp is lit so as to heat the bottom of the molds; then turn the metal into the top of the molds and it will run down and form the lead. If necessary, in casting thin leads, take hold of lever E and give the molds a jerk; then unscrew the crank G and take the lead out; and to take the molds out when hot, take hold of the center pieces with nippers and tongs.

What I claim as my invention is—

1. Molds D and arms C, in combination with lever E, substantially as and for the purpose described.

2. Molds D, hung as specified, in combination with lamp F, substantially as and for the purpose set forth.

JOHN I. STURGIS.

Witnesses:

J. B. SMITH,  
E. J. SMITH.