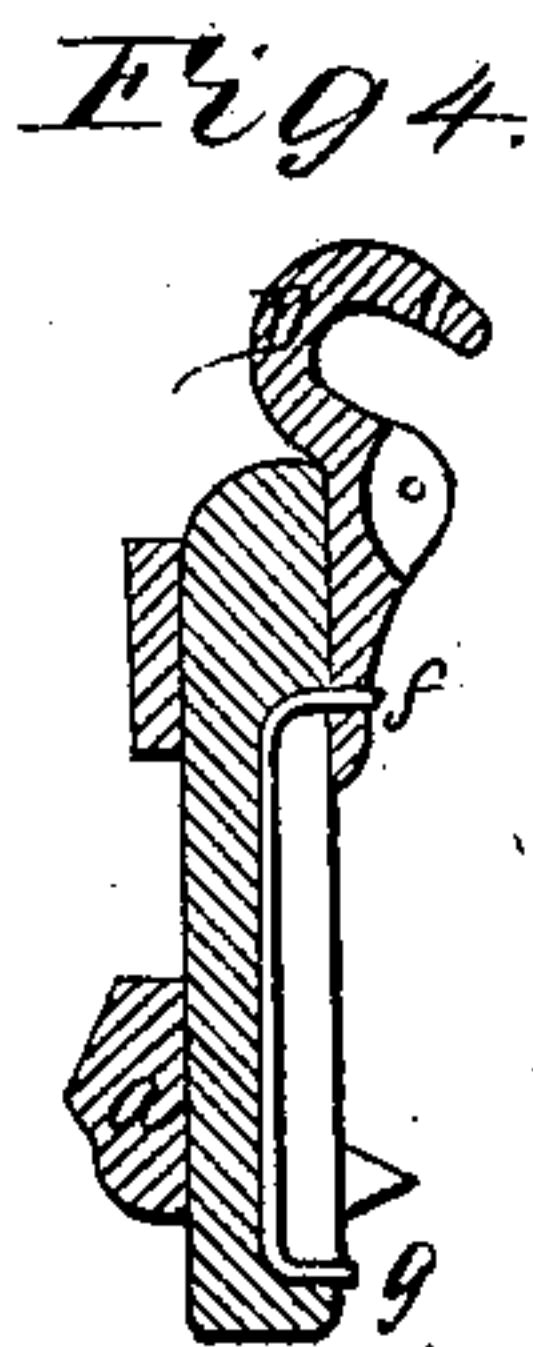
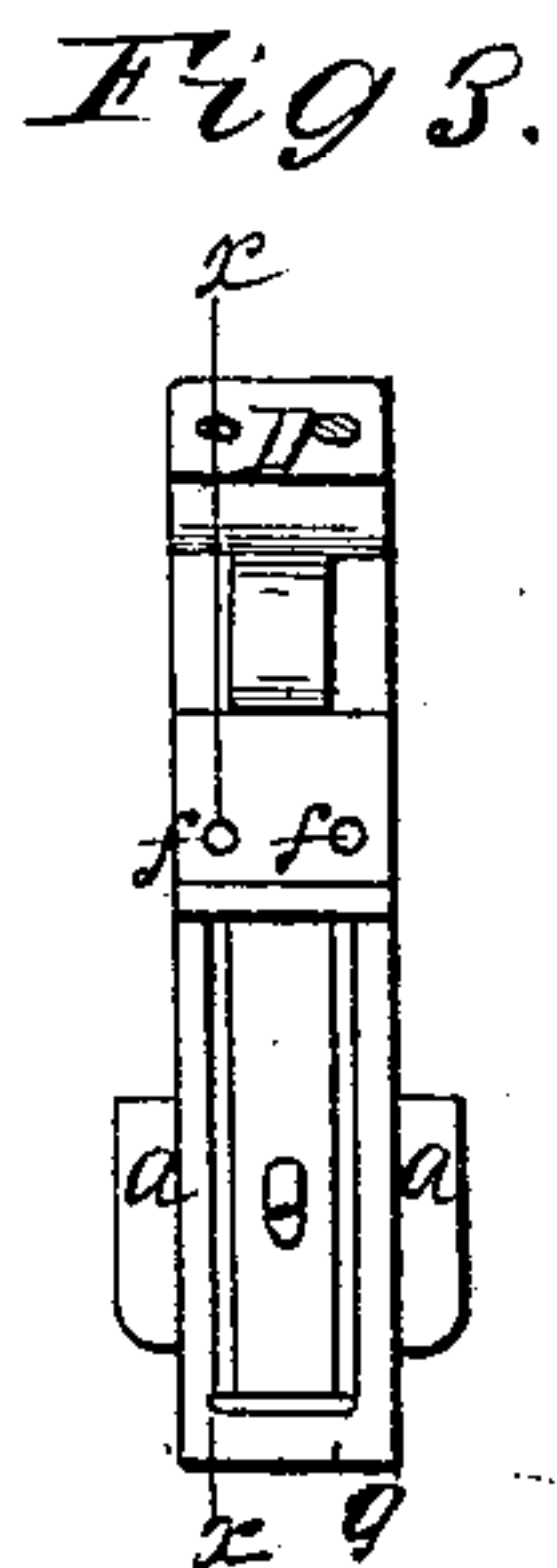
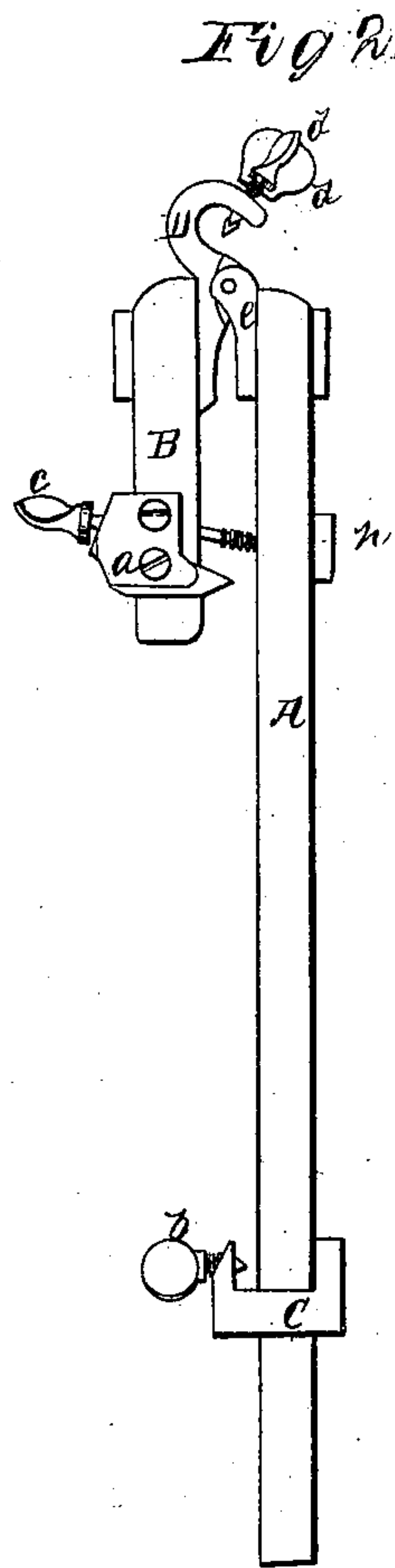
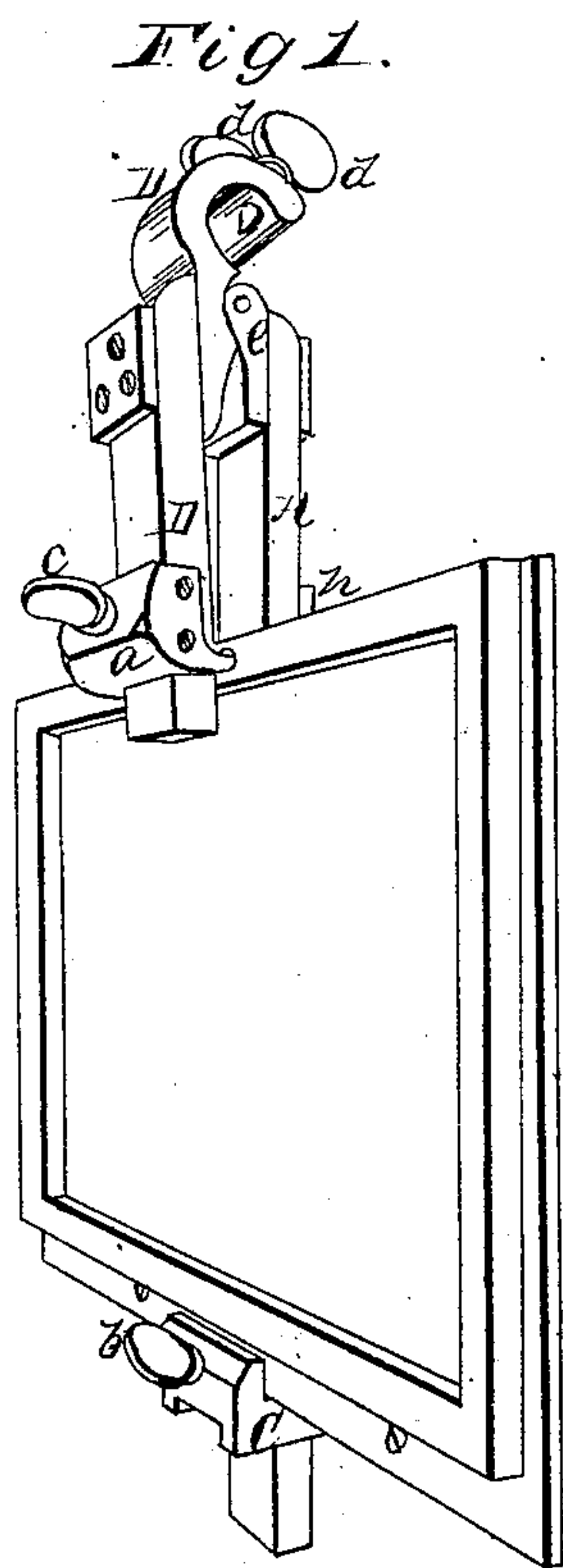


J. A. Adams,
Electrotyping
N^o 102,077. Patented Apr. 19, 1870.



Witnesses
Laing
Robert Adams

Inventor.
J. A. Adams

United States Patent Office.

JOSEPH A. ADAMS, OF BROOKLYN, NEW YORK.

Letters Patent No. 102,077, dated April 19, 1870.

IMPROVEMENT IN ELECTROTYPING.

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

I, JOSEPH A. ADAMS, of Brooklyn, in the county of Kings and State of New York, have invented a new and improved Connection Griper for Electrotypers' Use, of which the following is a specification

Nature and Objects of the Invention.

My invention consists in certain novel means or mechanism for making a perfect electric connection between a battery and the conducting surface of an electrotyper's mold; and

Its object is to greatly facilitate the operation of electrotyping, as will be fully set forth hereafter.

Description of the Drawings.

Figure 1 is a perspective view of my improved griper, illustrating the manner in which it holds the mold;

Figure 2 is a side view of it;

Figure 3 is a view of the inner side of the shorter arm of the griper; and

Figure 4 is a sectional view of fig. 1, taken through the line *x x*.

General Description.

The griper is composed of two arms, A B, connected together by a hinge joint formed of the two pieces, D E.

The upper end of the plate D is bent into the form of a hook, and is provided with screw-holes for the reception of the screws *d d* which are employed to connect the griper to and hold it securely upon the rod suspended over the tank in electric connection with the battery; and the two arms of the griper are operated by the thumb-screw *c*, which passes through the plate *a*, and works in the nut *h* upon the arm A, so that the two arms are pressed together by turning the screw.

The plate *a*, secured upon the shorter arm of the griper, is furnished with two points, *i i*, which fit into holes made for the purpose in the rim of the molding-pan, at or near the center, so that when the arms of the griper are screwed together the points will be pressed into the holes.

The sliding clamp upon the lower end of the arm A is provided with a clamp-screw, by which the lower rim of the molding-pan is securely clamped upon the lower end of the arm. It is arranged to slide upon the arm in order to admit pans of different sizes.

The shorter arm of the griper is provided with a conducting-wire, *f*, soldered to the end of the piece D and laid in grooves cut in the arm B. It is covered entirely with wax, except at the point G, where it is exposed to come in contact with the conducting-surface of the mold.

The parts composing the griper are made of brass or copper and "fat" pine wood, so strongly impregnated with resin as to resist the action of the acid solution in which it is immersed. Hard rubber, or wood artificially impregnated with or protected with a covering of coal-tar, paraffine, wax, or any suitable varnish, may be used in place of the "fat" pine.

By this construction the electric connection is made with the conducting-surface of the mold only, and the pan itself is entirely out of the current of electricity, so that no copper can be precipitated upon it. This removes the necessity of covering the back and edges of the pan with wax before immersing it in the solution of sulphate of copper, as in the mode generally practiced, where the pan is connected immediately to the conducting-wire of the battery, and also saves the time and labor expended in removing the wax from the surface of the molding-pan before it can be used again, as the surface of the pan must be true and smooth in order to obtain a perfect impression of the type or wood-cut in the wax.

Claim.

I claim as my invention—

Connecting a battery with the face of a mold to electrotype the same, substantially as described and specified.

J. A. ADAMS.

Witnesses:

C. A. DURGIN,
EDWARD E. OSBORN.