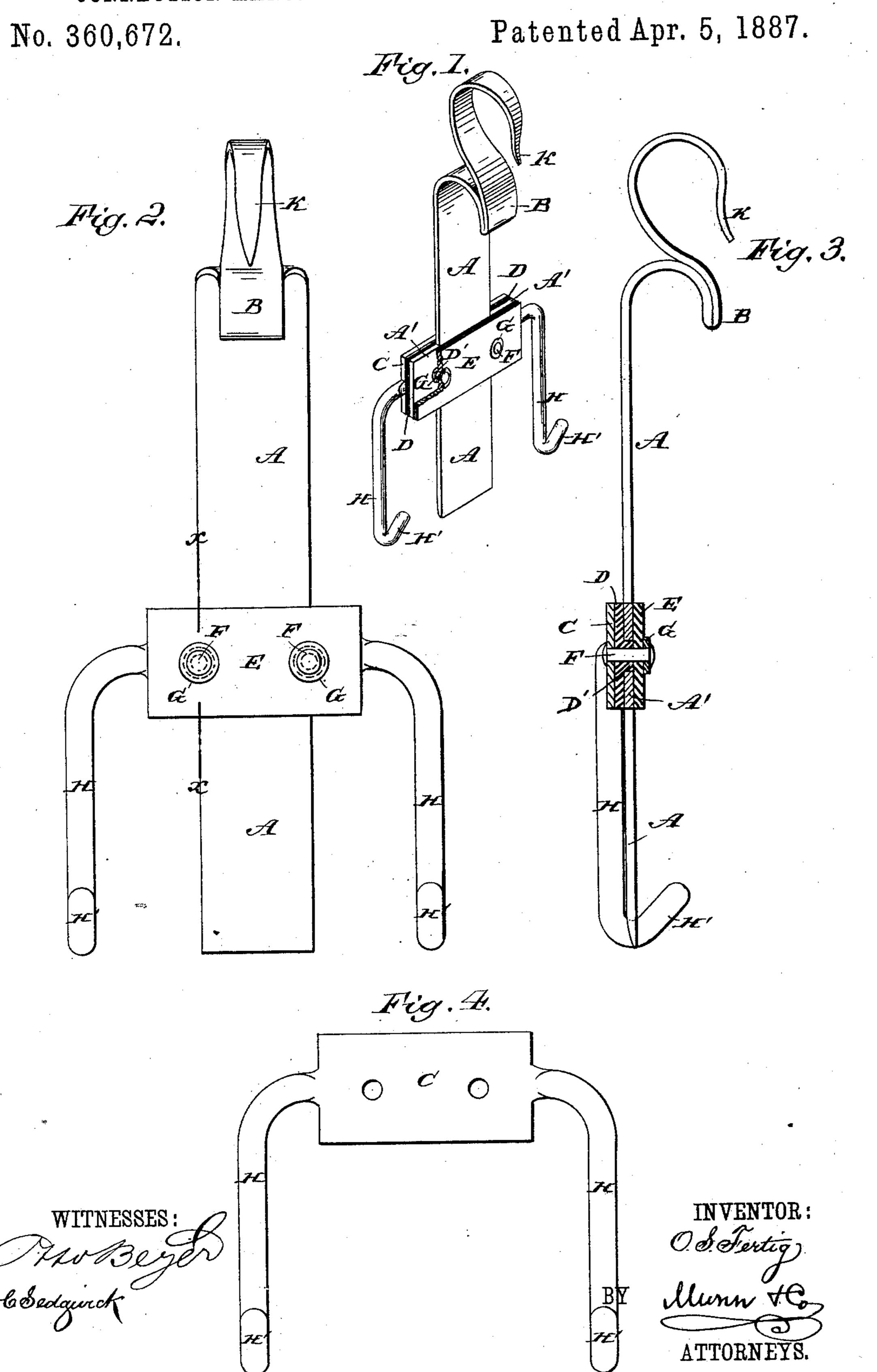
## O. S. FERTIG.

CONNECTION HANGER FOR ELECTROTYPING APPARATUS.



## United States Patent Office.

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## CONNECTION-HANGER FOR ELECTROTYPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 360,672, dated April 5, 1887.

Application filed October 20, 1886. Serial No. 216,724. (No model.)

To all whom it may concern:

Be it known that I, Otto S. Fertig, of the city, county, and State of New York, have invented a new and Improved Connection-5 Hanger for Electrotyping Apparatus, of which the following is a full, clear, and exact description.

The object of my invention is to provide new and useful improvements in the connecto tion-hanger for which United States Letters Patent No. 151,892 were granted to H. Lovejoy, H. W. Lovejoy, J. H. Ferguson, and M. J. Creegan, June 9, 1874, and reissued May 27, 1879, the purpose of the instrument being to 15 sustain the molding-case in the depositing-vat of the electrotyping apparatus, and at the same time make electric connection with the face of the mold, the case being insulated from the conducting-strip of the hanger.

The invention consists in certain novel features in the construction of the connectionhanger, as hereinafter fully set forth and claimed, whereby it is rendered simpler in construction and more effective in operation.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my im-30 proved connection-hanger, parts being broken out to reveal certain details of construction. Fig. 2 is an enlarged face view of the same. Fig. 3 is a vertical sectional view on the line x x, Fig. 2. Fig. 4 is a front view of the sus-35 taining-hooks and their connecting-plate.

The body of the instrument is formed of a broad flat strip, A, of suitable conducting material, as copper, bent to form a hook, B, at its upper end, which is received on the rod 40 extending across the top of the depositing vat or trough of the electrotyping apparatus.

At or about the middle part of the strip A the same is enlarged to form a flat rectangular plate, A', at the back of which is secured a 45 similar flat metallic plate, C, carrying the casesustaining hooks, hereinafter described, an insulating-plate, D, of corresponding size and shape, being interposed between the conducting-plate A' and the sustaining-plate C, and a 50 second insulating-plate, E, being arrangéd over the face of the conducting-plate A'. The four | the drawings, the several plates being of uni-

plates E A' D C, as thus arranged, are secured together by rivets F F, passed through apertures in the several plates and upset upon metallic washers G, resting on the front insulat- 55 ing-plate, E, the rear insulating-plate, D, being formed with bosses or bushings D', received in correspondingly-enlarged apertures in the conducting-plate A', the rivets F being passed through said bushings, so as not to make con- 60 nection between said conducting-plate and the sustaining-plate C.

The plate C is provided at its opposite ends with the case-sustaining arms H, which may, if desired, be sweated upon said plate, and ex- 65 tend outward and downward parallel with and at each side of the conducting-strip A, hooks H' being formed on the lower ends of said arms, on which hooks the molding-case is supported.

Upon the upper supporting hook, B, is sweated or otherwise secured a second hook, K, the point of which is sharpened, so that when the connection-hanger, with the attached mold or case, is removed from the depositing- 75 vat or restored thereto the time-card, which is received on the point of the hook K, will not be displaced on handling said hook.

When the hanger constructed as in the patent before mentioned, with the conducting 80 arms or bearers on either side of the central supporting-hook, was removed from and replaced in the trough, as is frequently done to test the thickness of the deposited shell, the molding-case, being supported at one point 85 only, was apt to tilt to one side, bringing the bearer in contact with said case and causing the metal to be deposited thereon. With my improvement this objection is completely removed, as the case is supported on either side, oo and even in case of deflection the bearer, being centrally placed, cannot come in contact with the case. Further, sediments and other impurities continually accumulated around the socket used in the former construction and in 95 the angle of the diverging bearers, thus establishing an electric connection between said bearers and the sustaining-hooks supported in the socket, and causing a further deposition of metal on the molding-case.

By using the flat-plate connection shown in

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form size, no recesses or angles are left in which such sediments can collect, so that the plating of the molding case is completely avoided.

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

In a connection-hanger for electrotyping apparatus, the combination, with the conducting strip A, having the plate A', formed there-

with, of the plate C, of like size thereto, carrying the case-sustaining hooks, the insulating plate D, interposed between the said plates A'C, and the insulated fastening-rivets passed through the several plates, substantially as 15 shown and described.

OTTO S. FERTIG.

Witnesses:

EDGAR TATE, C. L. BURGER.