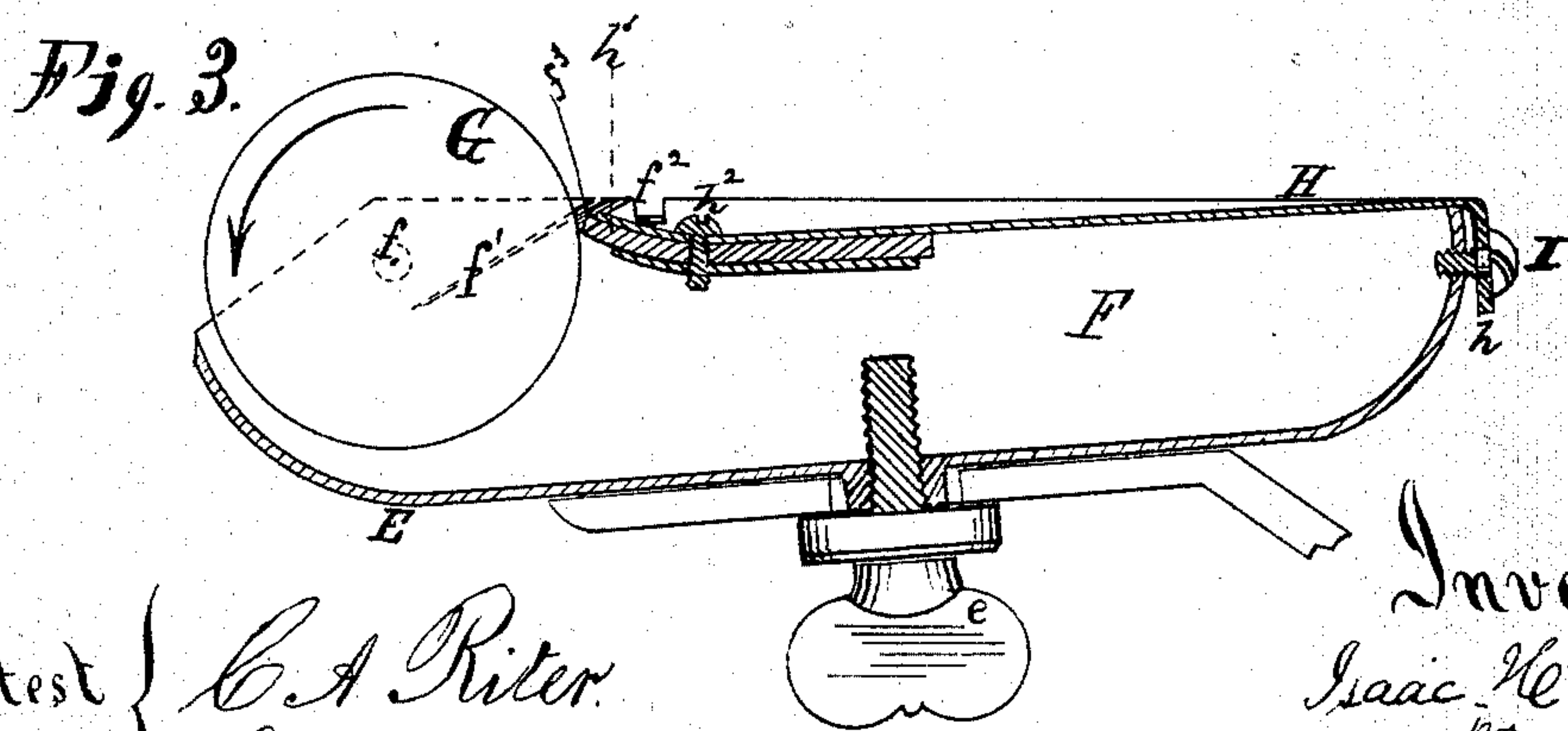
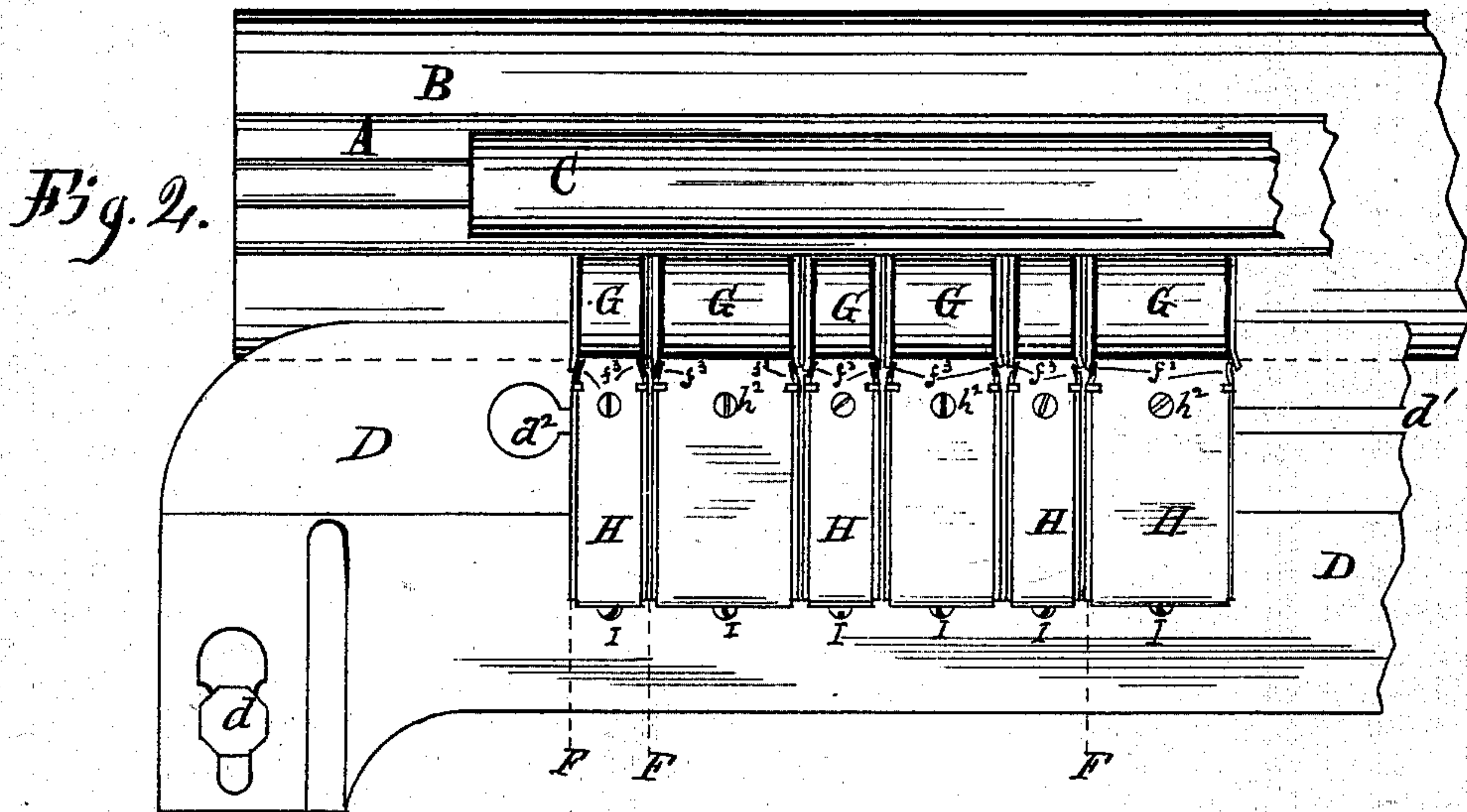
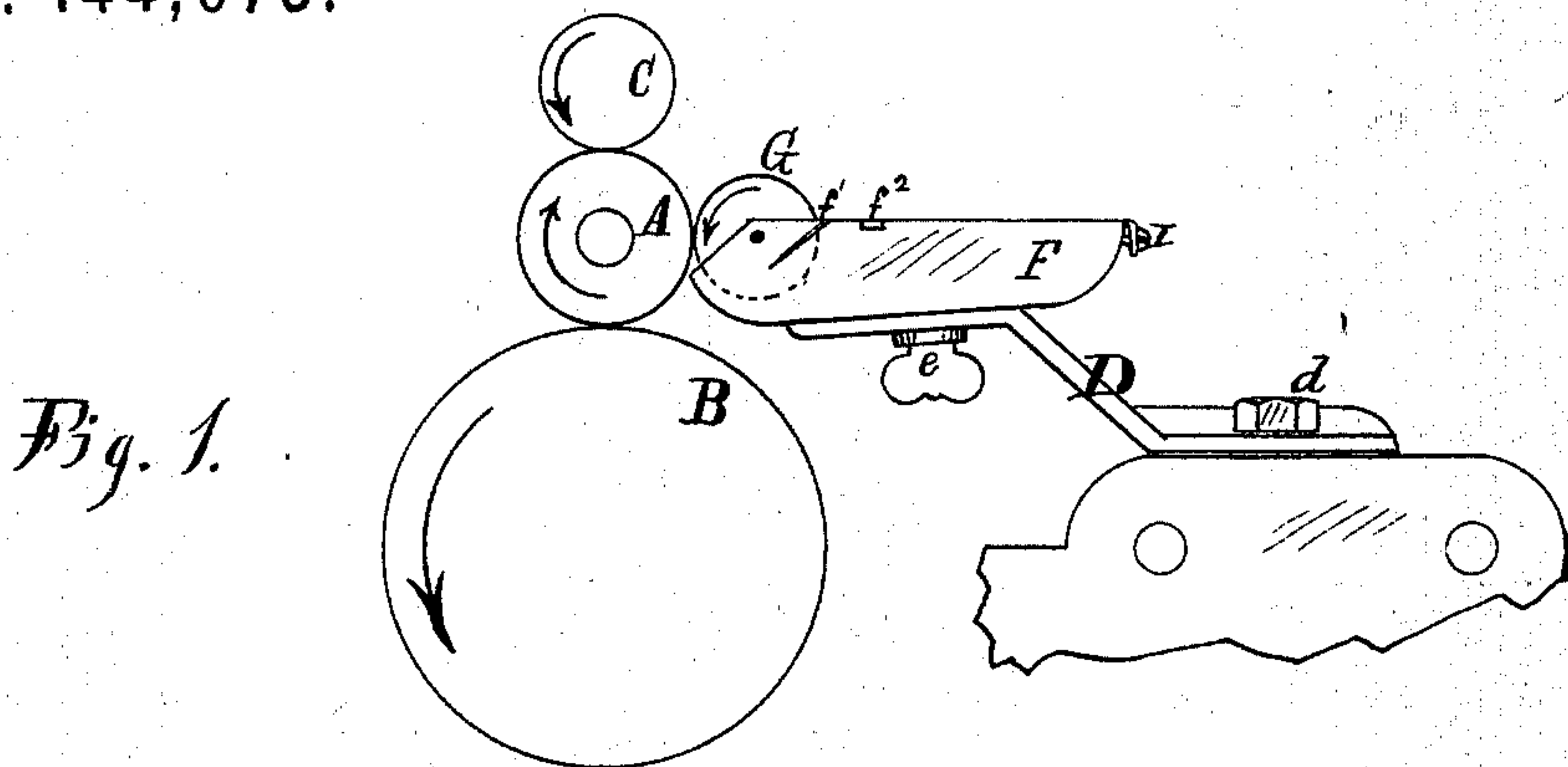


I. HART.
Inking Apparatus.

No. 144,673.

Patented Nov. 18, 1873.



Attest { C. A. Riter.
J. B. Corbin.

Inventor
Isaac Hart
per
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att'y.

UNITED STATES PATENT OFFICE.

ISAAC HART, OF CINCINNATI, OHIO.

IMPROVEMENT IN INKING APPARATUS.

Specification forming part of Letters Patent No. **144,673**, dated November 18, 1873; application filed July 2, 1873.

To all whom it may concern:

Be it known that I, ISAAC HART, of Cincinnati, county of Hamilton and State of Ohio, have invented a new and useful Improvement in Inking Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing making a part of this specification.

Figure 1 is a side elevation, Fig. 2 a plan, and Fig. 3 is an enlarged longitudinal vertical section, of one of the departments of my fountain.

Similar letters of reference indicate like parts.

My invention relates to a fountain for feeding ink to the distributing-roller of a printing-press; and it consists in a method of constructing the sides of said fountain with scrapers to remove the ink from the ends of fountain-roller as the same rotates.

In construction, my invention is as follows: A is a composition-roller, receiving the ink from the fountain, and resting on roller B, which transfers it to the rollers passing over the face of the type. Roller C, resting on that of A, is the distributing-roller, which has a given lateral motion while it revolves; and both A and C receive their rotary motion from that of B. My invention relates to a device for supplying one of the above rollers with ink of different colors, and in strips of various widths, according to the type used and the taste of the printer. A strong bridge, D, is fastened to the press by bolts d d . A slot, d^1 , in bridge D, runs the length of the form the press is capable of printing, and at each end said slot is enlarged, as seen at d^2 , to permit the thumb-screws on the fountain to pass through freely, for the sake of convenience in setting up the series or changing the several sections. Each section or compartment is constructed as follows: The bottom plate E is straight along its center and curved upward at each end. The outline thus formed gives the shape of the lower portion of the two metallic spring-walls F F. These are provided on their interior sides with two short studs or pins, f f , which enter corresponding holes in the center of roller G, allowing the said roller to rotate freely, and almost touching the bottom of the vessel. Each wall F has a cut, f^1 ,

at its top, just opposite the roller G, extending obliquely downward below the center of said roller. This cut has the lower lip bent inwardly, as at f^3 , so as to rest with its edge against the side of the roller. The top of the vessel is closed by spring-cap H, which is turned down at the rear end at h , and held in place by means of a screw, I. A small space is left between the part h and the upward-curved end of plate E, which leaves room for adjustment of the cap longitudinally. The cap H is so bent as to have an upward tendency, but is kept down by two small projections, f^2 f^2 , on the walls F, thus keeping the cap rigidly to its place. The front end of cap H is provided with a scraper, h^1 , either of metal, or rubber, leather, &c., which can be adjusted to present its edge parallel with the periphery of roller G, or out of parallel, as may be desired.

The operation of my invention is as follows: The bridge D being placed permanently in position, and the number of colors, as well as their respective widths, decided on, ink is placed in the vessels, and the several sections placed on the bridge, where they are fastened by means of the thumb-screws e , the rollers G being brought in contact with roller A. Motion being given to the press, the rollers of the press and fountain move in the directions indicated by the arrows shown in Fig. 1. The caps of the several sections may now be placed into position under the projections f^2 f^2 , and against roller G, and the flow of ink regulated by means of screw I. As the roller G revolves, the ink in the vessel adhering to the periphery as well as its sides, all or nearly all the ink is scraped off the latter by the lips f^3 , while so much of the ink as is necessary only is permitted to pass the scraper h^1 .

Should it be required to give one side of the roller G more ink than the other, the independent scraper h^1 can be turned in either direction by releasing the screw h^2 , which holds it to the cap H.

It will be observed that, however thin the walls F may be made, some space must exist between the several rollers G; but this is closed by the lateral motion of the distributing-roller.

In practice, it is found that, from the imperfect connection of lips f^3 and scraper h^1 , small beads of ink are raised on the edges of the

roller G; but this surplus fills the important office of supplying the deficiency caused by the space necessarily existing between the several fountain-rollers, as above mentioned.

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

In combination with the ink-roller G, the

walls F, slit as at f^1 , and said wall, at one side of said slit, bent inward, as at f^3 , to form scrapers for the ends of said rollers G.

ISAAC HART.

Attest:

T. VAN KANNEL,
F. B. SEUFERT.