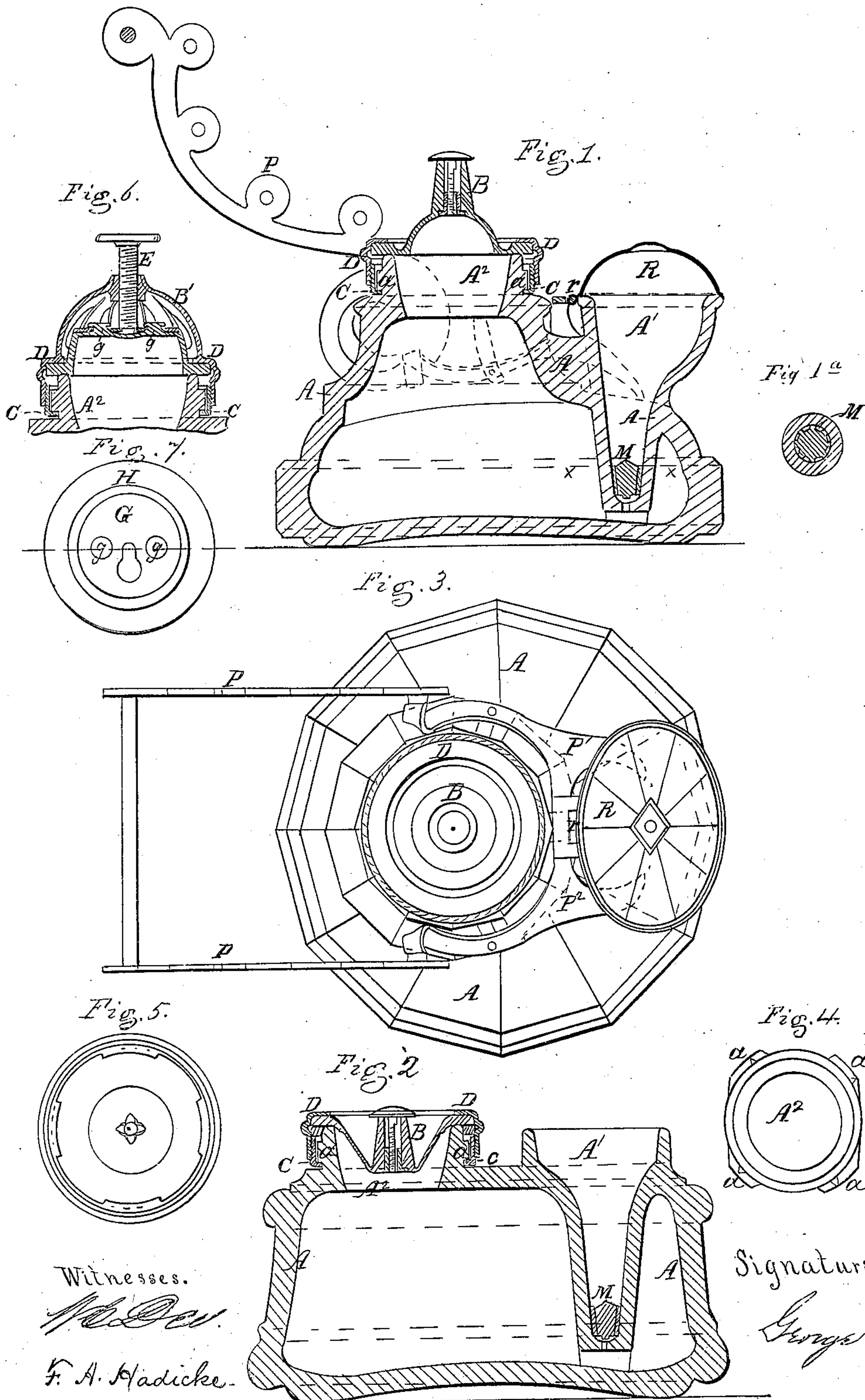


G. Merritt, Inkstand.

No. 76,792.

Patented Apr. 14, 1868.



Witnesses.

[Signature]

F. A. Hadicke.

Signature.

George Merritt

United States Patent Office.

GEORGE MERRITT, OF BROOKLYN, NEW YORK.

Letters Patent No. 76,792, dated April 14, 1868.

IMPROVEMENT IN INKSTANDS.

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, GEORGE MERRITT, of the city of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Inkstands; and I do hereby declare that the following is a full and exact description thereof.

I will first describe what I consider the best means of carrying out my invention, and will afterwards designate the points which I believe to be new therein. The accompanying drawings form a part of this specification.

Figure 1 is a longitudinal section.

Figure 1^a is a horizontal section across the filter-plug and the funnel.

Figure 2 is a corresponding section, with the ink raised.

Figure 3 is a plan view.

Figure 4 shows the orifice for filling, with the covering removed.

Figure 5 shows the covering inverted.

Figure 6 shows a modification of the covering.

Figure 7 is a top view of the flexible diaphragm.

Similar letters of reference indicate corresponding parts in all the figures.

Tints are employed merely to aid in distinguishing parts, and do not imply differences of material. The material of the body may be glass, and the additional parts may be brass and India rubber.

A is the main body, and A¹ is the dipping-funnel. This latter is formed in one piece with the main body, A, and it extends down through the latter nearly to the bottom, as indicated in figs. 1 and 2. A² is the orifice, through which ink is introduced to replenish the inkstand, at long intervals. It is covered by an elastic cap, B, of vulcanized India rubber, or analogous material, which is raised and lowered, as required, to induce a corresponding reverse movement in the ink in the funnel A¹.

Figs. 1 and 2 represent the cap B as arranged for what is called the jump, that is to say, the cap is pressed down, and its dome-like position is reversed, and it is maintained in that position by its own elasticity, when it is desired to raise the ink in the funnel A¹, fig. 1 showing the jump raised, and fig. 2 showing it in its depressed position. This is a movement familiar to manufacturers of what are known as fountain-inkstands, but the means by which my jump is attached is novel, and involves peculiar advantages.

C is a ring of metal, having an internal flange at its lower end, and adapted to lock under the collar d, as represented. Figs. 4 and 5 show the construction of these parts, and their mode of locking together.

The outer surface of the ring C is threaded, and adapted to match to the internal threads on the superior ring D. This ring D has an internal flange at its upper edge, as indicated, and this latter presses down forcibly upon the vulcanized rubber or flange of the India-rubber jump. In order to apply the parts together, the ring C is first applied, and then the jump is laid in place, and finally the ring D is laid upon the whole, and screwed down. The screwing together of the rings D and C confines the jump and all the parts very firmly. When it is desired to remove the jump to introduce ink, it is only necessary to unscrew the ring D from the ring C, and the jump is readily removed, and the aperture A² is then exposed, to allow the introduction of a fresh supply of ink into the inkstand.

Figures 6 and 7 represent a modification, where, instead of a jump, a cap of India rubber is raised and lowered, as required, by the aid of a screw. The screw E is tapped through the boss in the framework, B¹, on the top of the ring D. The lower end of the ring D is adapted to turn freely in a metal plate, G, secured in the top of the rubber cap H, by extending the latter up through holes in the plate, and causing it to be enlarged therein, so as to hold in the manner of a rivet. It will, of course, be readily understood that there may be a large number of these rubber rivets, so to speak, and that they may be distributed very uniformly over the whole surface. The rubber being introduced and held therein in a suitable mould, while in a soft state, is vulcanized in place.

Fig. 6 is a vertical section of these parts entire, and fig. 7 is a plan view of the rubber cap H and metal plate G alone. The rubber rivets are indicated by *g* in both of these figures. The hole in the plate G, which receives the screw E, is not circular, but is extended out one side from the centre, and is there lodged sufficiently to allow the easy introduction of the head or enlargement of the screw at the lower end. The head being introduced through this hole, the screw is then moved readily inward, until it reaches the centre of the plate G, where it then stands, and operates in the part of the hole which is only of sufficient size to allow the neck to turn freely. It there operates in the same manner as if the hole were circular, and of the same diameter as the neck of the screw.

The main body, A, and the funnel B are formed in one piece, at a single operation, by pressing in moulds and blowing, in the manner familiar to glass-workers.

M is what I term a filter-plug. It is formed of glass, and nearly stops the lower portion of the funnel, A¹, but the sides of the plug are grooved, as indicated by *m*, so that there are sufficient channels for the ink to run. In the absence of some such check, there is a liability that the jump may force the ink up so rapidly as to throw it out, and thus to damage articles in the vicinity, especially when operated by an inexperienced person or child. But my filter-plug, M, by checking the velocity of the motion of the ink, and allowing it to rise slowly through a number of small apertures along the side of the funnel, renders it impossible to produce such a result, however violently the jump may be operated.

The pen-rack P is locked upon the body A of the inkstand, by the elasticity of its sides, P¹ P², in the manner indicated. One side of the part P is extended, and adapted to form a pen-rack. The other side seizes and clings around the funnel A¹, as indicated in dotted lines in figs. 1 and 3, and thereby holds it in a fixed position, and forms a hinge, *r*, on which turns the collar R, which protects the funnel from dust and evaporation when the inkstand is not in use.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. I claim the filter-plug M, in combination with the funnel A¹, and with the jump H, arranged to operate substantially as and for the purpose herein set forth.
2. I claim the duplicate collars C D, threaded, the one male and the other female, as shown, and arranged relatively to each other and the neck of the orifice A², and to the jump H, or equivalent means of raising and lowering the pressure of the air in the inkstand, substantially as and for the purposes herein specified.
3. I claim the pen-rack, P P¹ P², arranged to lock, by its elasticity, upon the main body of the inkstand, and to form a hinge for the cover R, substantially as herein set forth.

GEORGE MERRITT.

Witnesses:

WM. C. DEY,

F. A. HADICKE.