

A.H. Price

Ruffle

N^o 39701.

Patented Aug. 25, 1863

Fig. 1.

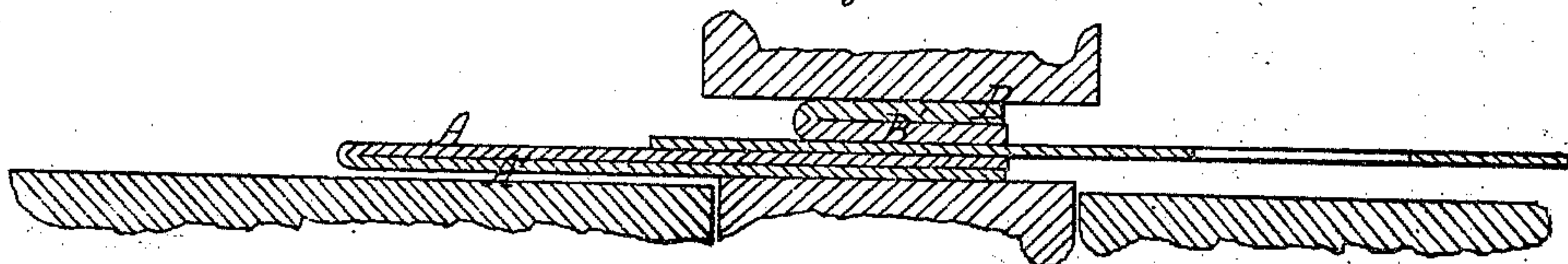


Fig. 2

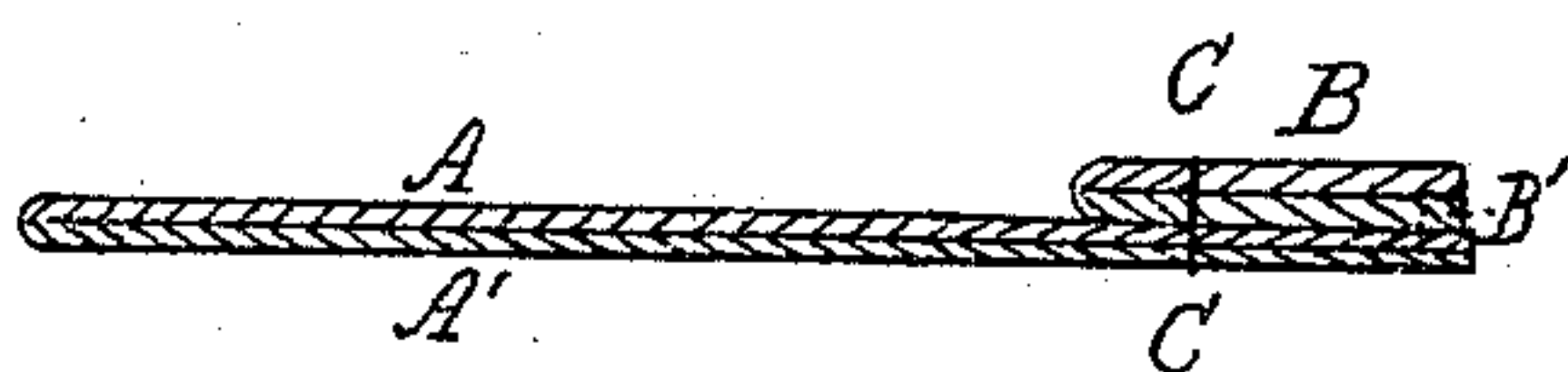


Fig. 3



Fig. 4.

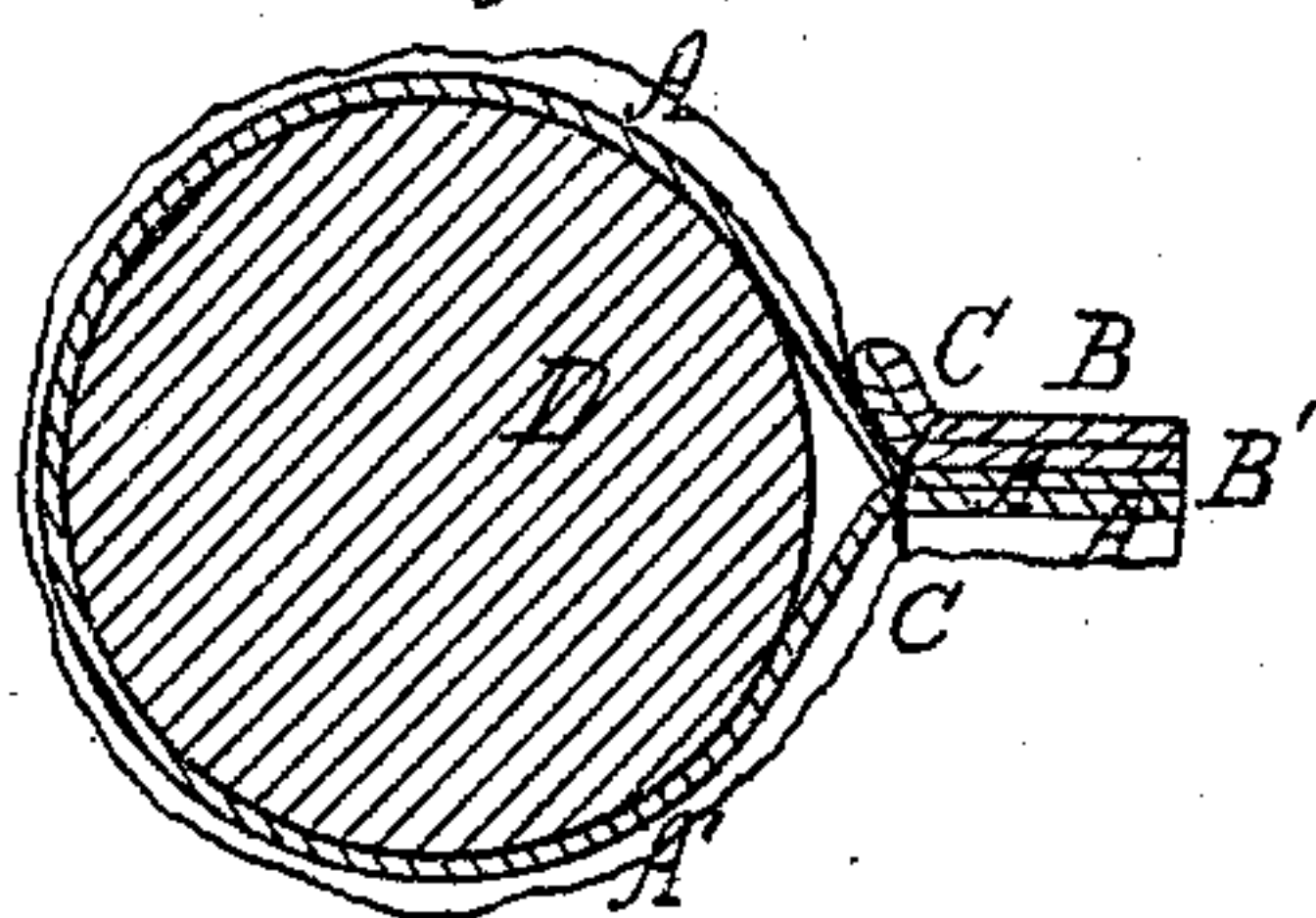


Fig. 5

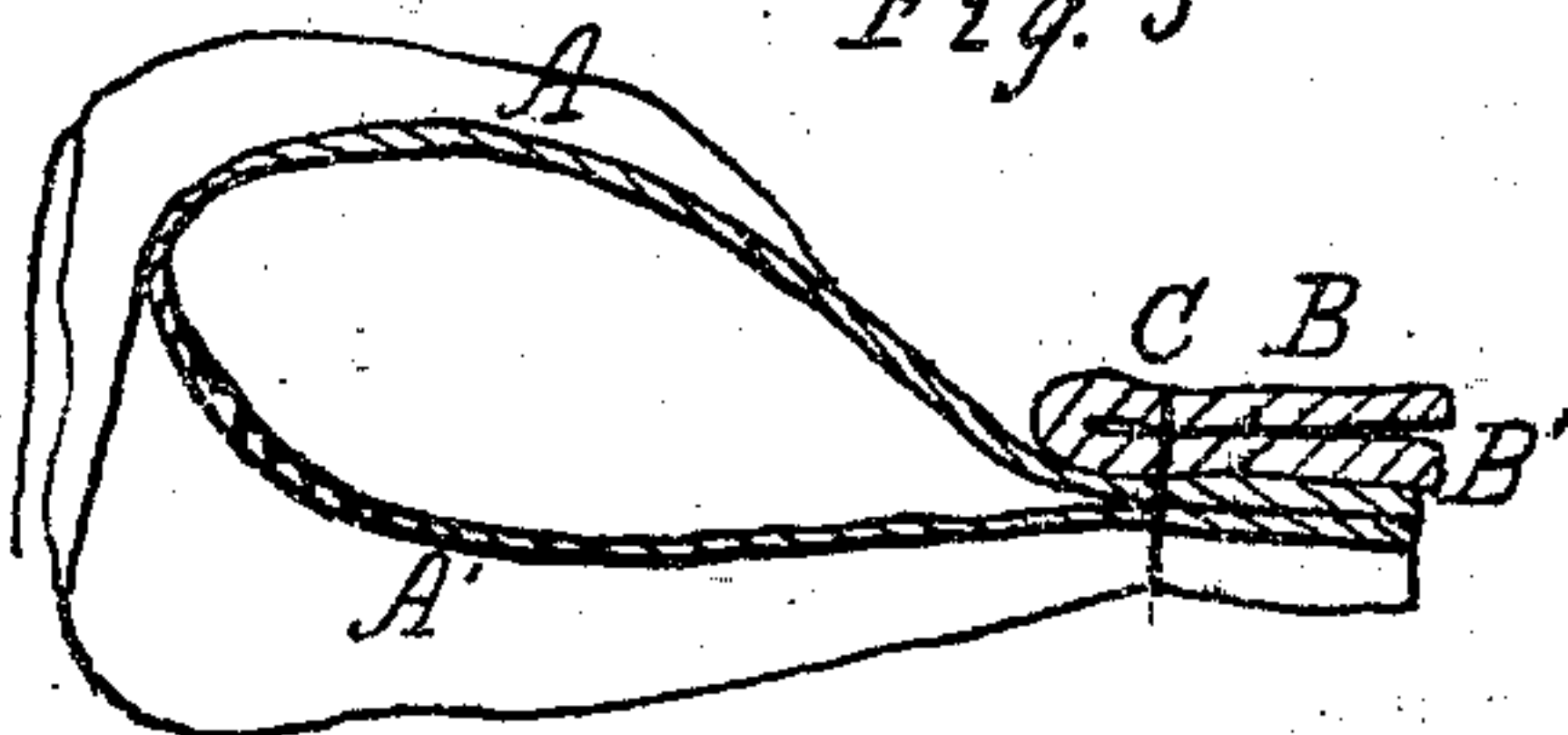


Fig. 7

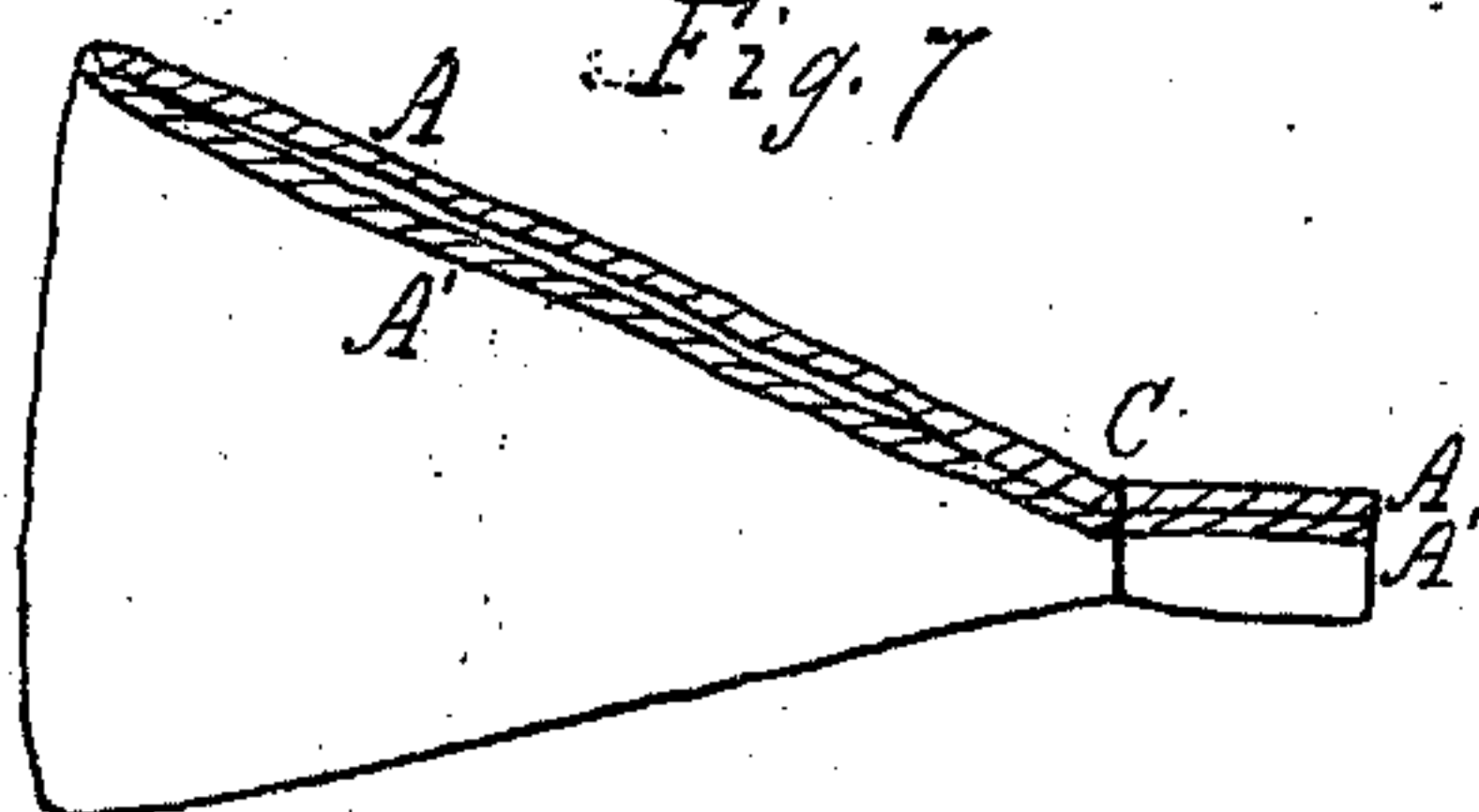


Fig. 8

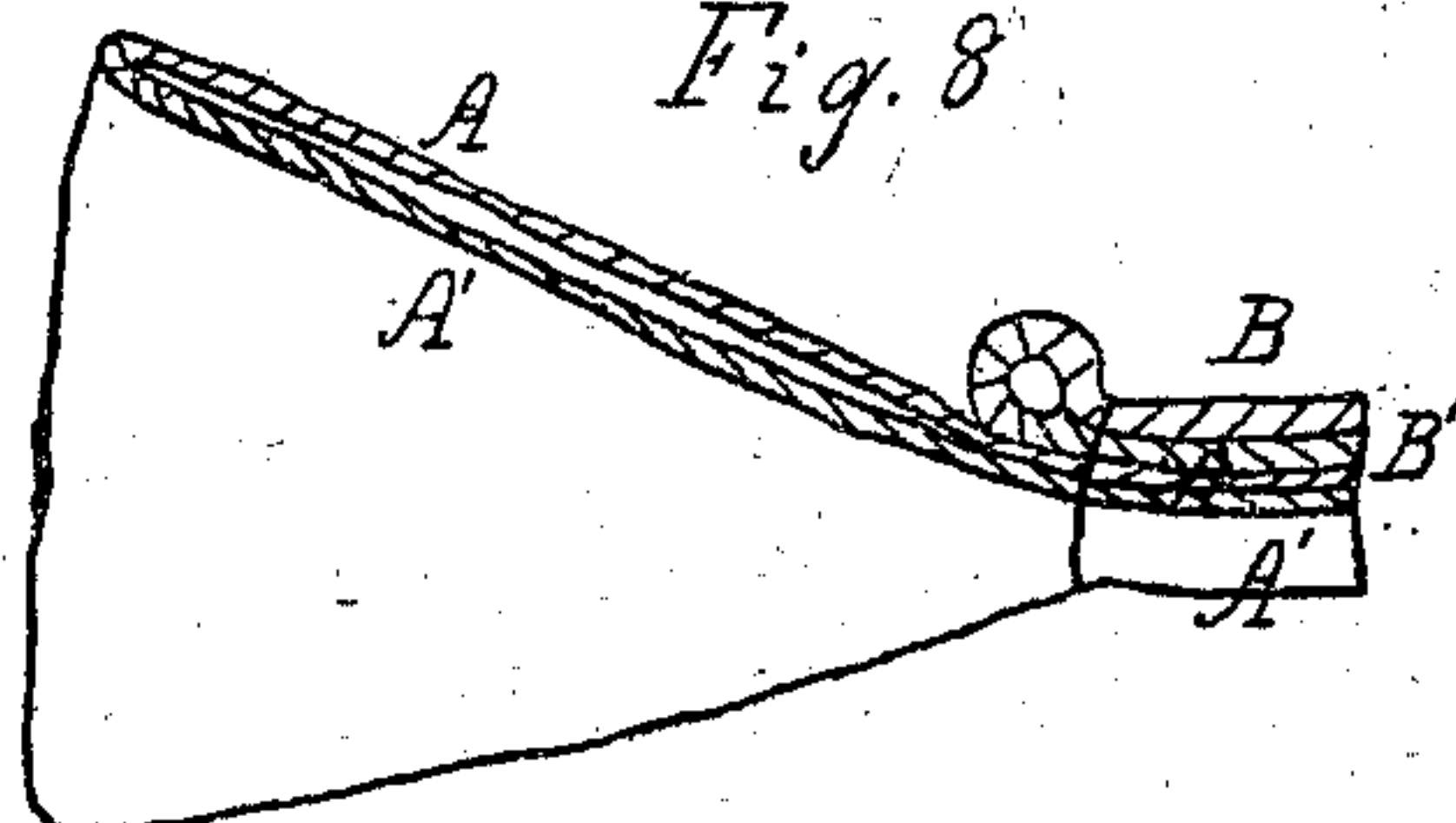
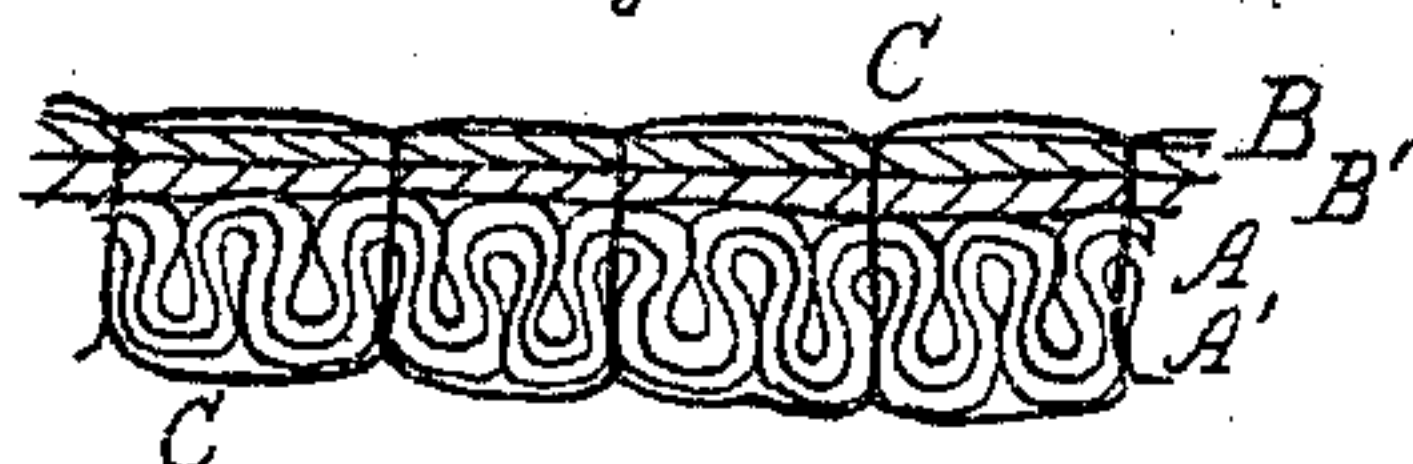


Fig. 6



Witnesses

Thomas D. Stetson

D. W. Stetson

Inventor

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UNITED STATES PATENT OFFICE.

ABBY H. PRICE, OF NEW YORK, N. Y., ASSIGNOR TO THE MAGIC RUFFLE COMPANY, OF SAME PLACE.

IMPROVEMENT IN MACHINE-MADE RUFFLES.

Specification forming part of Letters Patent No. 39,701, dated August 25, 1863.

To all whom it may concern:

Be it known that I, ABBY H. PRICE, of the city, county, and State of New York, have invented a certain new and Improved Ruffle, which I term a "Puff-Ruffle;" and I do hereby declare that the following is a full and exact description thereof.

My new ruffle is made on a sewing-machine, and the plaits or gathers are made and permanently confined at a single operation of the machine. A single series of sewing-machine stitches holds the gathers when the ruffle is completed, and no temporary or other series is required at any stage of the manufacture. In these respects my new ruffle resembles the ruffles patented to Geo. B. Arnold in 1860. It is an improvement thereon, and differs therefrom in the fact that the gathered stuff is peculiarly arranged, as will appear below.

The accompanying drawings form a part of this specification. All are on an enlarged scale. The tints are employed merely to distinguish the sections of the gathered stuff and thread.

Figure 1 represents the position of the parts in a sewing-machine during the process of manufacture. It shows a cross-section of the goods and of the adjacent parts of the machine, taken in the plane of the needle, the function of the gathering mechanism being supposed to have not yet been performed. Fig. 2 represents the goods after they have been sewed together and removed from the machine, the gathers having been produced and secured in the interim, but the same not being shown in this view. Fig. 3 is a corresponding cross-section, partly in perspective, showing the gathers. This view exhibits my new ruffle complete as it comes from the sewing-machine, ready for use. Fig. 4 shows the same in the act of being opened or puffed—an operation which causes it to assume an inflated condition. Fig. 5 represents the ruffle in partial perspective after it has been thus opened or puffed. Fig. 6 is a longitudinal section in the plane of the stitches. Figs. 7 and 8 show some of the varieties of my ruffle, Fig. 7 being without a binding and Fig. 8 with both a binding and a cord.

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

To produce my new ruffle I have used with success and prefer a sewing-machine in which a double feeder is employed, as described in a patent issued to George B. Arnold, dated May 8, 1860. I have used also and prefer in the manufacture of my ruffle with the binding a separator to stand between the binding and the stuff to be gathered while the gathering is being effected, as described in a patent issued to Geo. B. and Alfred Arnold, dated the 25th of September, 1860. The under surface of the separator is made very smooth, so as to offer little resistance to the forward motion of the thin fabric below while the latter is in the act of being gathered.

To enable others skilled in the art to make and use my invention, I will proceed to more fully describe its construction and use by the aid of the drawings and of the letters of reference marked thereon, describing first the variety which has a plain binding, as seen in Figs. 1 to 6, inclusive.

A A' is a thin strip of muslin having a width a little more than twice as great as the ruffle desired. In cutting the strip I prefer to cut it crosswise of the piece of goods, so that it may be more easily gathered, and I make such strip continuous by sewing a number together end to end. I fix an ordinary folding-gage upon the sewing-machine and pass this strip through it, so that it is delivered under the separator folded along the middle, the two halves A and A' lying tightly pressed together, so that both may be gathered by the feeder in the same manner as a single thickness of the thicker material would be gathered.

B B' is a narrow strip of muslin, similarly folded in its center and introduced above the separator. It may be stiffer than A A', and I prefer to cut it lengthwise of the piece of goods.

C C C, &c., are lock-stitches formed by the sewing-machine and holding the gathers firmly in place. The gathers are formed and confined by these stitches as the goods pass through the machine. The feeders, acting under the doubled strip A A' in the manner ordinarily exhibited in gathering a single strip, crumple up, shorten, and in common language gather both thicknesses of stuff A and A', and the needle descends and embraces and confines them with a single series of stitches, and the

operation is conducted rapidly and continuously until the material is exhausted.

I have represented lock-stitches; but these are not essential. Any form of sewing-machine stitch may be employed.

My ruffle may be used in the condition in which it comes from the machine—that is to say, with the parts A and A' lying close together throughout their whole breadth; or the space may be expanded and the ruffle crimped and puffed by introducing and causing to traverse through the space between these parts a piece of wood or other material of a suitable form, crowding or compressing the ruffle in the direction of its length as it is passed along.

D, Fig. 4, represents a cross-section of a piece of hard wood serving in this manner, and the work of thus preparing my ruffle, either when new or after it has been washed, is very slight, and will present no difficulty to a skillful laundress.

I wish it distinctly understood that although my new ruffle may with some propriety be designated "puff-ruffle," in order to give it a distinctive name and because of its adaptability or readiness to be puffed in the manner referred to, I do not confine my invention to such use alone of my ruffle. My ruffle is ready for use in either a collapsed condition, as shown in Fig. 3, before the puffing has been done, or in the extended condition shown in Fig. 5, after the puffing has been done. In either condition it is advantageous. In the condition shown in Fig. 3 its appearance at a little distance is like the Arnold ruffle referred to; but it differs very materially therefrom in having no hem. The hem in the Arnold ruffle is liable to become disturbed and frayed out at intervals, especially after a severe washing and "doing up." Mine is free from risk of such

accidents. My ruffle in its collapsed state can be fluted, if desired, and can be treated in every respect like the Arnold ruffle with the advantage of being more durable and more absolutely uniform by reason of the absence of the hem, and with the additional advantage of being susceptible of puffing, as described, and thus readily distended and crimped.

My invention is not necessarily made with a binding. Fig. 7 shows a cross-section of my ruffle formed without a binding and having its gathers held by the thread alone, being like in this respect to the ruffle described in the patent issued to Geo. B. Arnold, dated the 25th of September, 1860, but differing therefrom in being formed of equal parts A and A', folded and confined as described. Fig. 8 shows my new ruffle with a binding and a cord. The cord is introduced in the manner described in a patent issued to me bearing even date herewith; but the ruffle shown in Fig. 8 differs from those shown in my said other patent in having the two equal parts A and A' folded and confined in the manner above described.

Having now fully described my invention and in what manner the same is produced, what I claim as novel, and desire to secure by Letters Patent, is—

The within-described puff ruffle as a new article of manufacture, the same having two equal parts, A and A', folded together, as described, and held in a gathered condition by a single series of machine-stitches, substantially in the manner and for the purpose herein set forth.

ABBY H. PRICE.

Witnesses:

THOMAS D. STETSON,
D. W. STETSON.