No. 663,660. Patented Dec. 11, 1900.

M. L. McGAHAN.

SHUTTLE THREADER FOR LOOMS.

(Application filed Oct. 14, 1899.)

(No Model.)

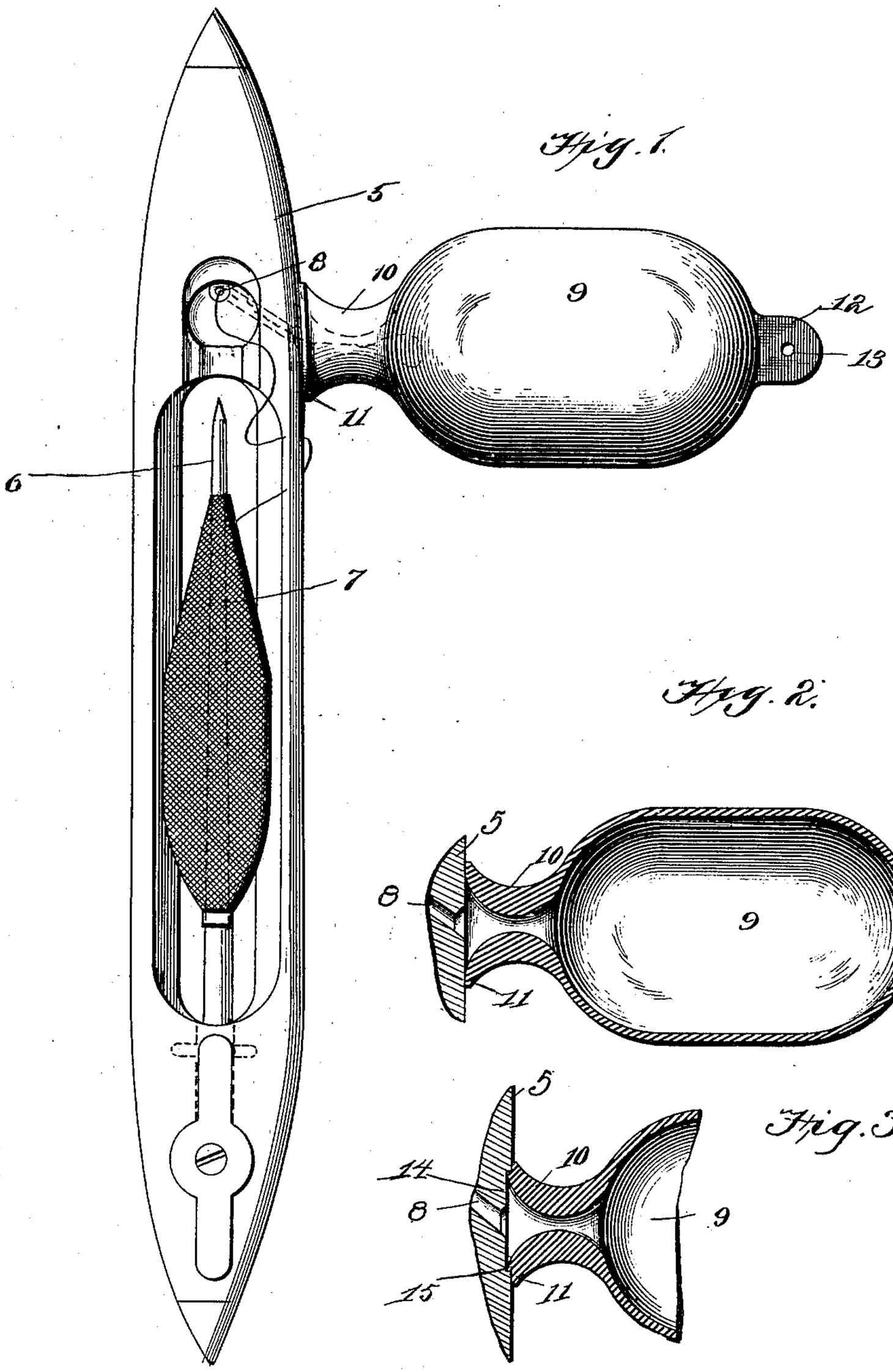

Fig. 1.

Fig. 2.

Fig. 3.

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SHUTTLE-THREADER FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 663,660, dated December 11, 1900.

Application filed October 14, 1899. Serial No. 733,662. (No model.)

To all whom it may concern:

Be it known that I, MARY LANNAN McGAHAN, a citizen of the United States, residing at Northbridge, in the county of Worcester and State of Massachusetts, have invented a new and useful Shuttle-Threader for Looms, of which the following is a specification.

My invention relates to loom-shuttle threaders, and has for its object to provide an improved means for threading the shuttle by suction or pneumatic power.

As is well known, much inconvenience has resulted to operators in threading the eye of loom-shuttles owing to the fact that it has been the practice heretofore of weavers to apply their lips to the orifice or eye of the shuttle to suck the thread therethrough. In the course of this operation dust and lint which was present would be inhaled into the person's lungs, and thus greatly impair her health. This is obviated by the use of my invention.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to explain its construction and operation, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a shuttle, showing my invention applied. Fig. 2 is a section through the bulb and a fragment of the shuttle, and Fig. 3 is a longitudinal sectional view of a slight modification.

Referring now to the drawings by reference-numerals, 5 indicates the shuttle, and 6 the spindle carried thereby, on which is the thread 7. The usual eye or orifice 8 is provided in the top of the shuttle, through which the end of the thread is adapted to be drawn. Adjacent to the exit of the orifice 8 is a pneumatic bulb comprising a hollow body 9, preferably substantially cylindrical, having at one end a neck 10, terminating in a flared mouth 11. It will be noticed the walls of the neck are considerably thicker than the body portion of the bulb. The reason for this is that when it is desired to press the mouth of the bulb firmly against the exit of the orifice 8 to suck the thread therethrough said neck will be sufficiently rigid to prevent collapse when the body portion will be sufficiently flexible to allow of an easy contraction.

I prefer to make the wall of the neck substantially crescent shape in longitudinal section at all points of its radius, as this will secure the desired rigidity and at the same time it will form a thin expanded lip at the other end of sufficient area to readily encircle the orifice in the shuttle, and thereby avoiding the care to properly place the threader upon the shuttle that would be necessary with a contracted mouth, and it will also form a yielding edge which will be firmly held against the side of the shuttle and prevent the entrance of air by suction from the exterior except through the orifice in the shuttle. For convenience in hanging a projection 12 is provided at one end, having a perforation 13.

In the use of the modification it will be necessary to drill a concave recess 14 in the shuttle surrounding the exit of the orifice 8, so that the flange 15 of the mouth 11 may fit snugly therein.

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

1. A pneumatic shuttle-threader comprising a compressible hollow body, one end of which is provided with a hollow projection, the outer end of said projection being thin and flaring and the wall being thickened at its center and substantially crescent-shaped at all points of its radius, substantially as described.

2. A pneumatic shuttle-threader comprising a compressible hollow body provided with a neck, the wall of which is thicker than the wall of the body and terminates in a flanged flaring mouth.

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