

March 6, 1951

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2,544,064

TAG HOLDING MEANS FOR LAUNDRY MARKING MACHINES

Filed Dec. 27, 1946

3 Sheets-Sheet 1

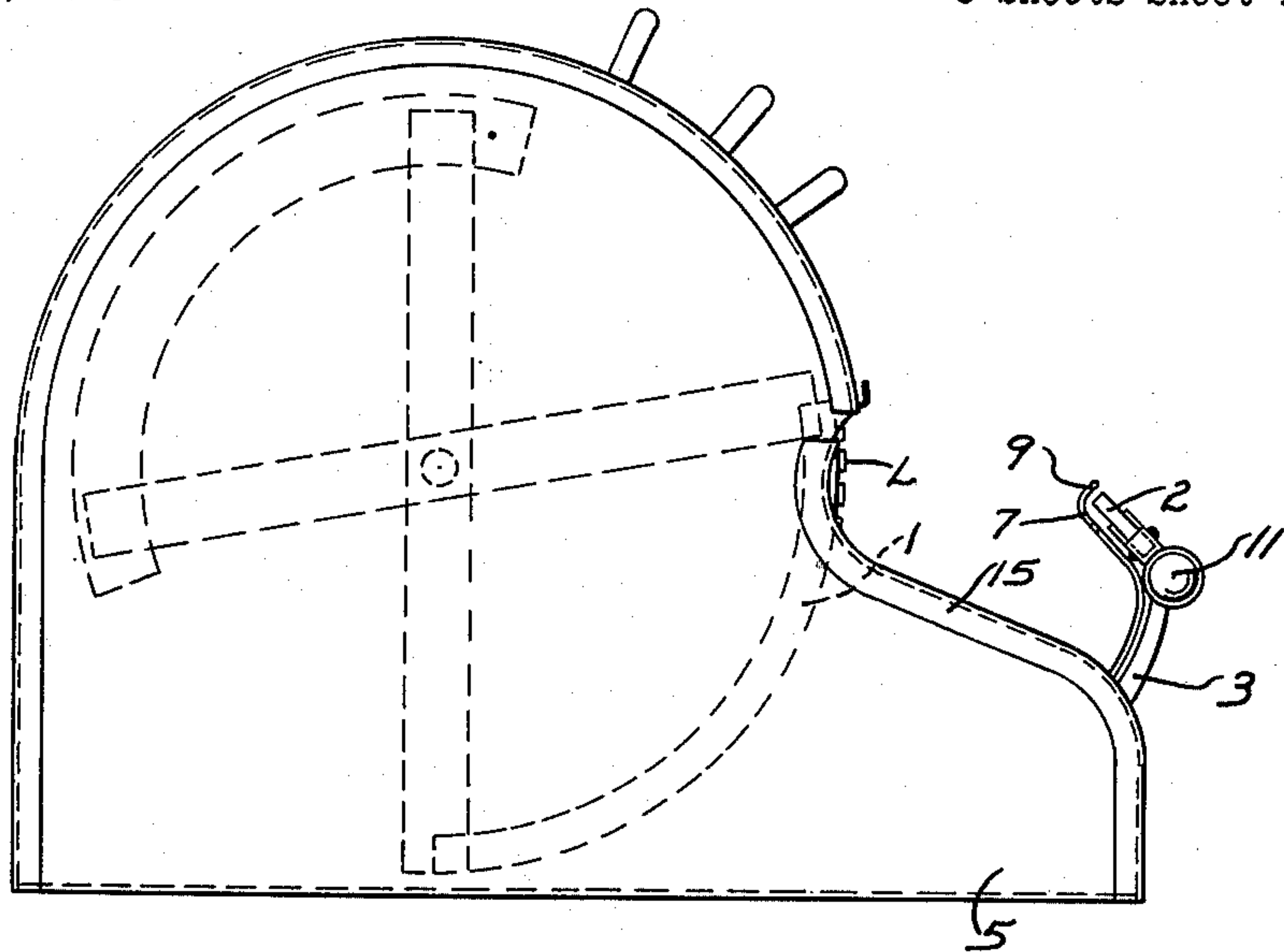


Fig 1

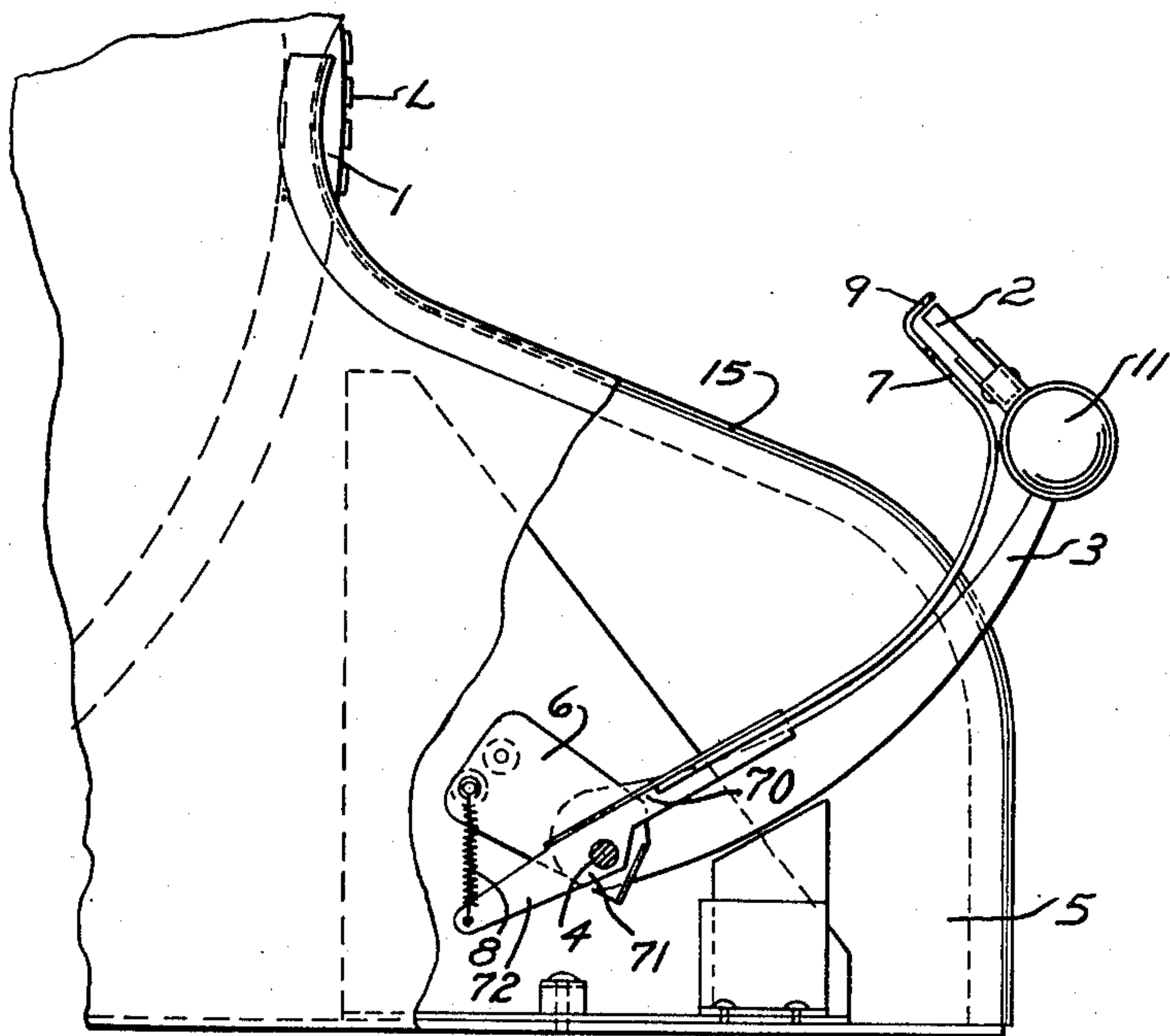


Fig 2

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3 Sheets-Sheet 2

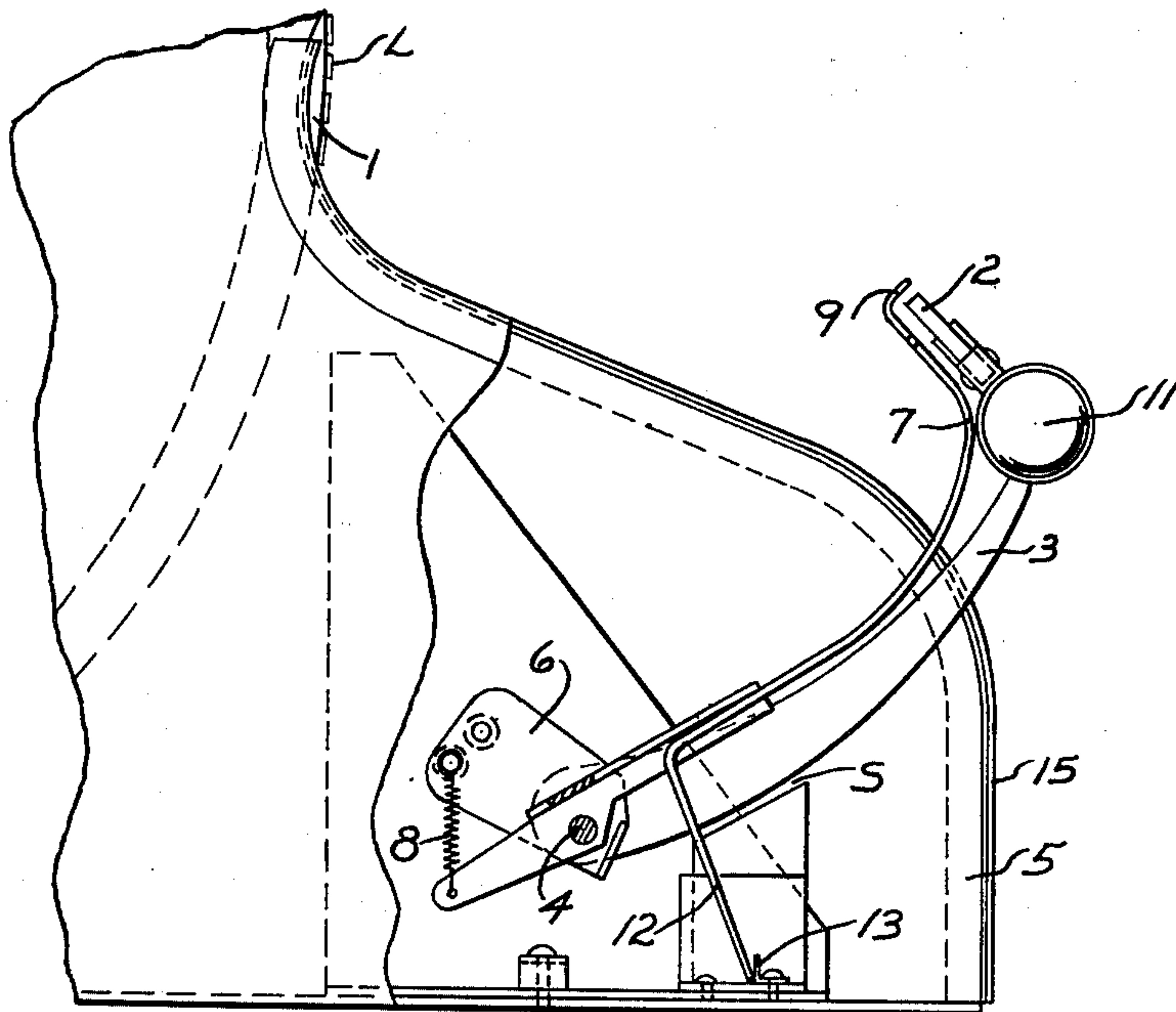


Fig 3

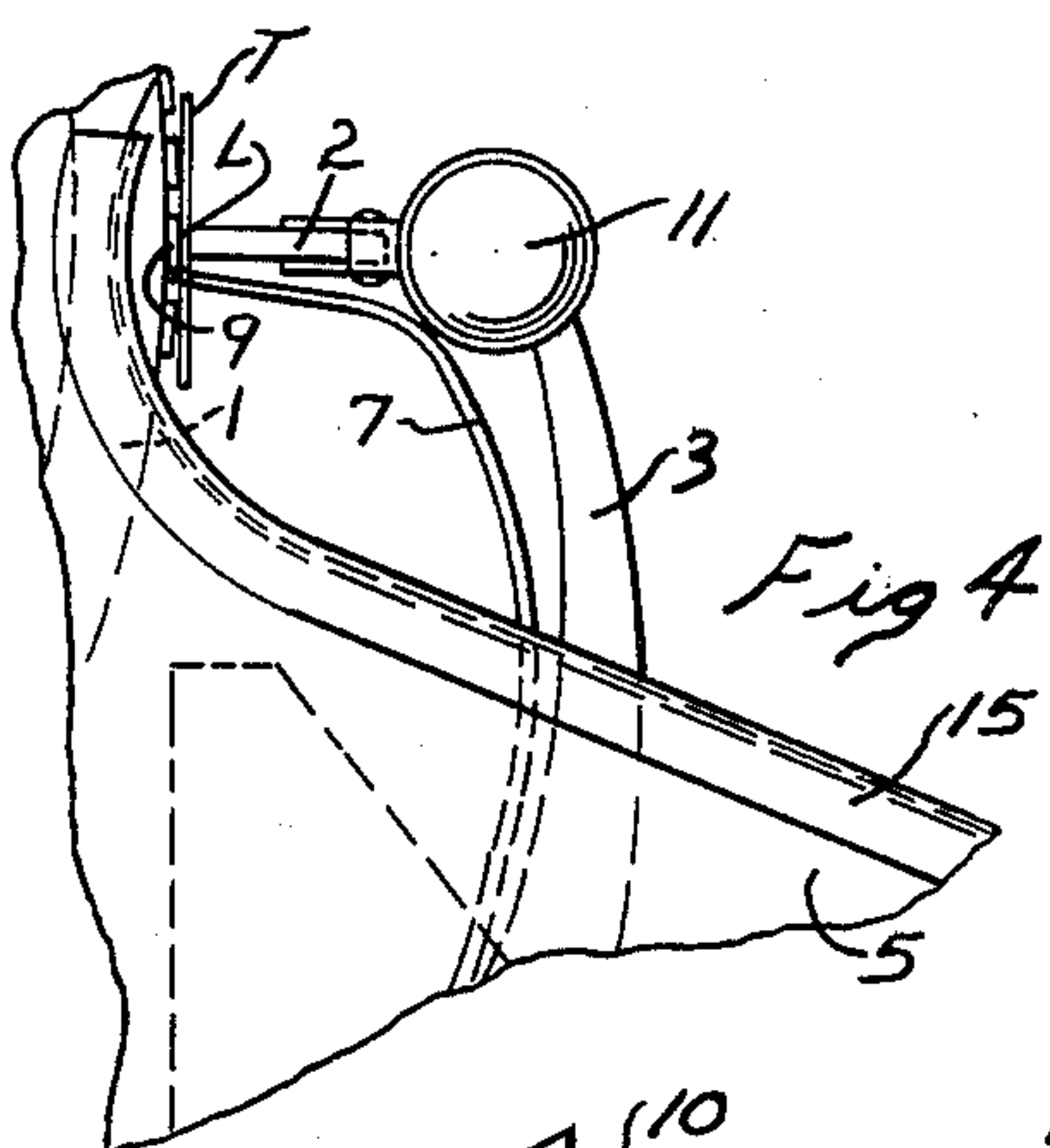


Fig 4

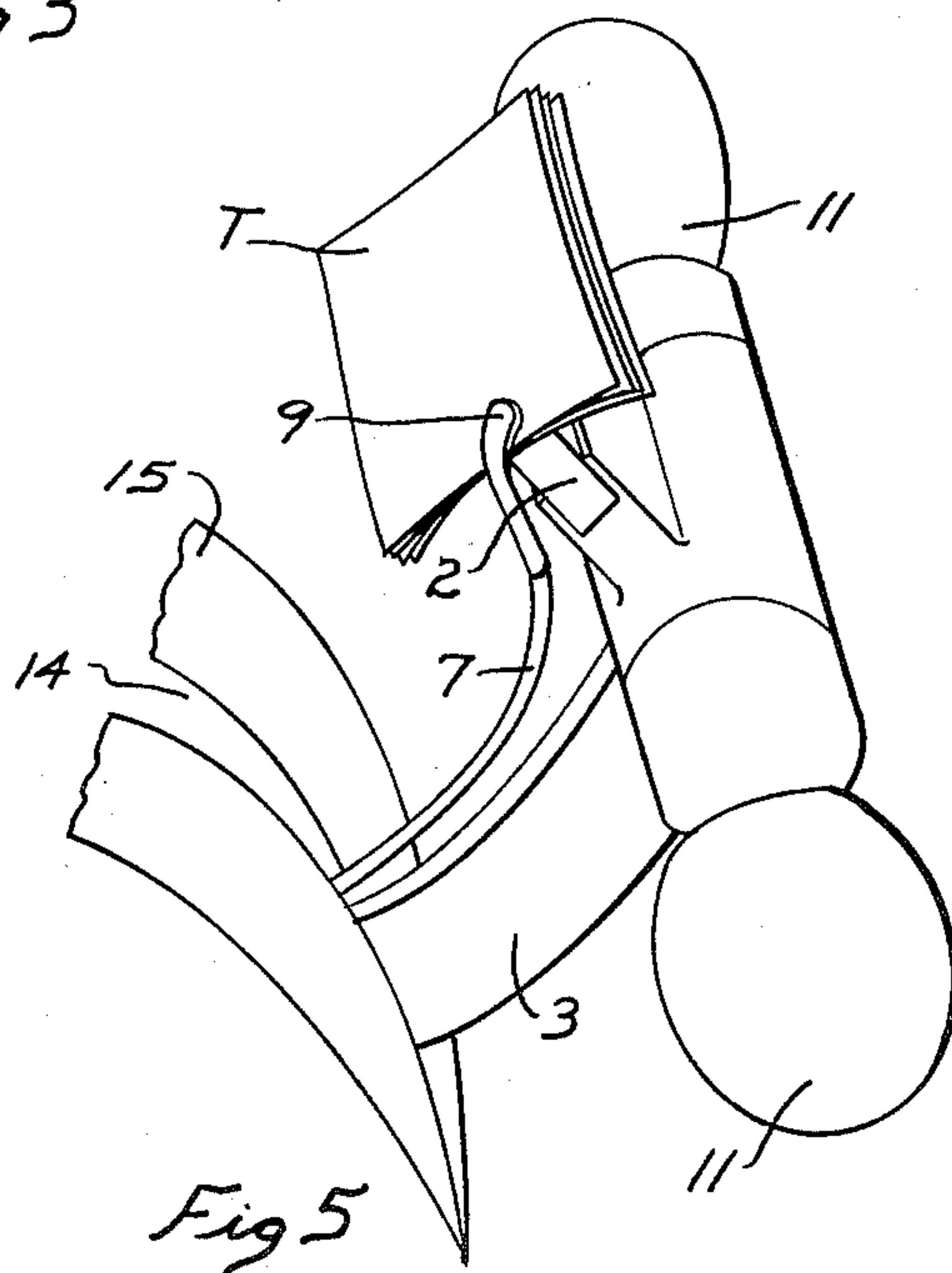


Fig 5

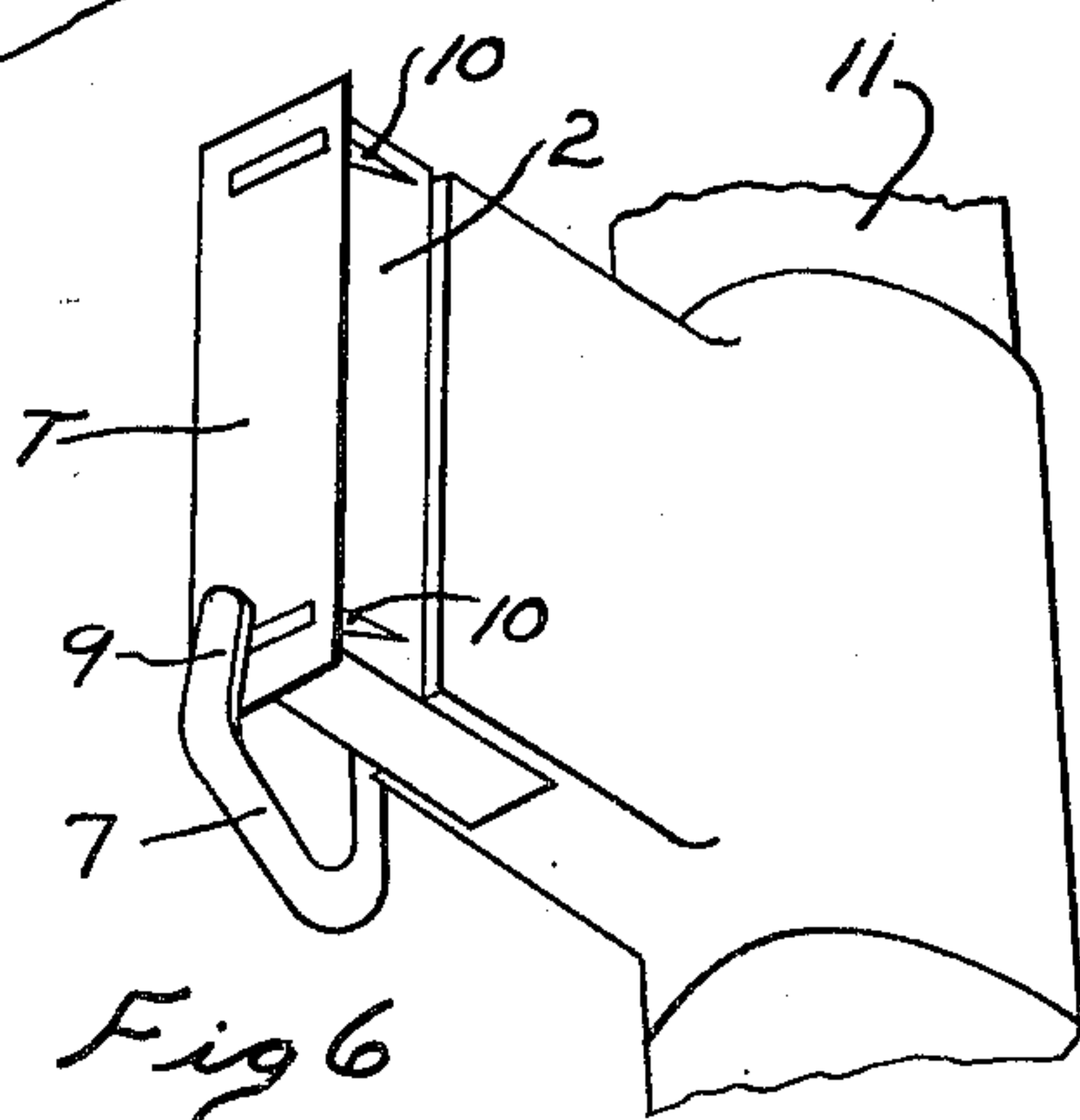


Fig 6

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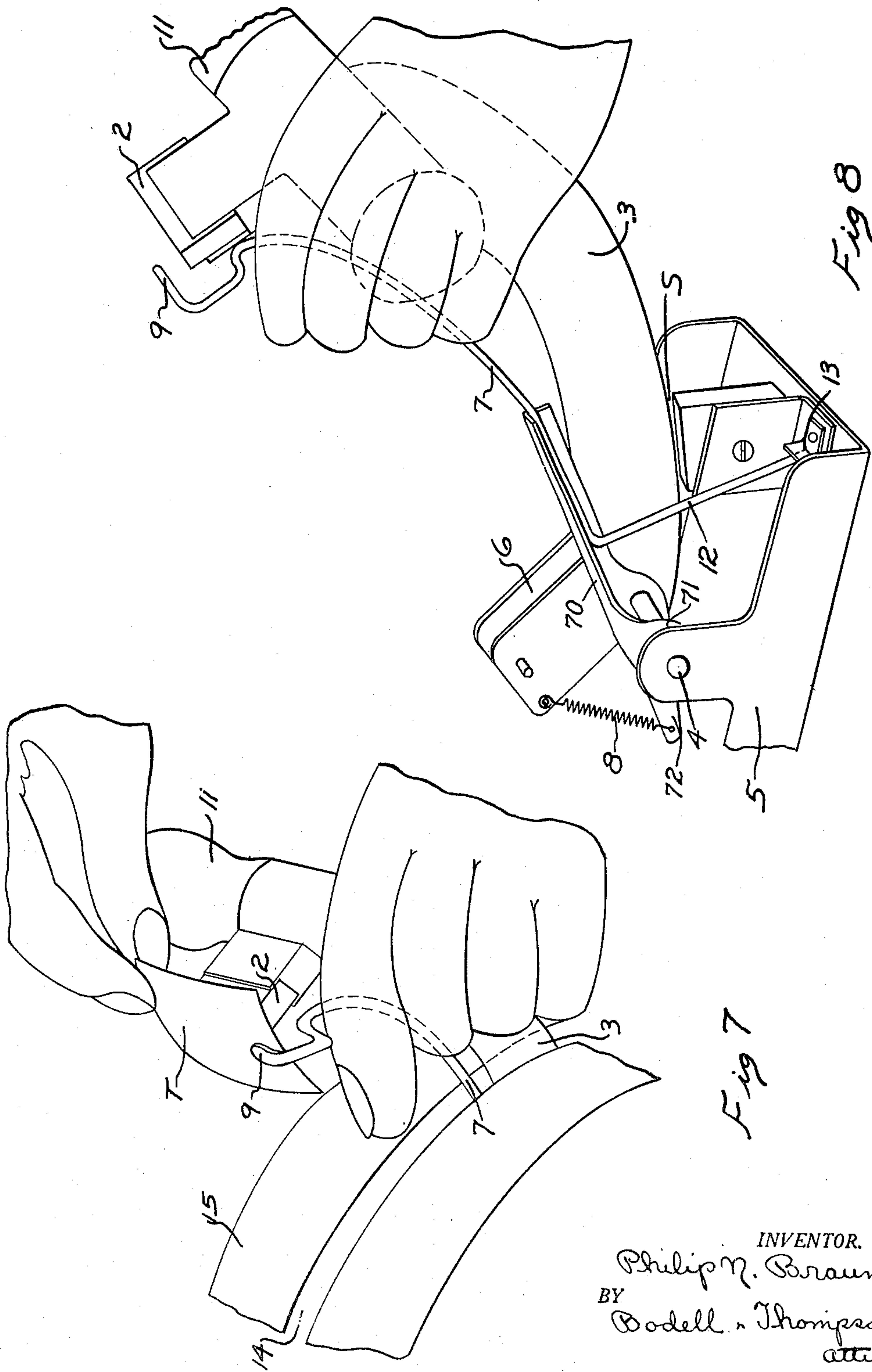
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3 Sheets-Sheet 3



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2,544,064

TAG HOLDING MEANS FOR LAUNDRY MARKING MACHINES

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Application December 27, 1946, Serial No. 718,879

2 Claims. (Cl. 101—408)

1

This invention relates to marking machines of the type used in applying identifying marks to pieces of laundry and dry cleaning work, and has for its object, a holder, for what for convenience are herein called tags, which holder is part of the printing mechanism of the printing machine and holds the tags against the platen of the printing mechanism during the printing operation on the tags. After being printed, the tags are attached to the pieces of laundry or dry cleaning work and remain thereon during the laundering or dry cleaning operation. The printing machines of this type are primarily for the purpose of printing the identifying characters directly on the pieces of work.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevation of a printing machine in which the tag holding means is applied, the printing mechanism being omitted.

Figure 2 is an enlarged fragmentary elevation, partly in section, of parts seen in Figure 1 illustrating the mounting of the tag holding member on the mounting for the platen.

Figure 3 is a view, similar to Figure 2, illustrating the means for stopping the tag holding member from movement as a unit with the platen as the platen approaches its starting position and permitting slight separation of the mounting from the tag holding member when the latter is stopped.

Figure 4 is a fragmentary elevation showing the tags carried by the printing mechanism when the platen is in printing position.

Figure 5 is a fragmentary perspective view showing a plurality of tags carried by the platen, the platen being shown as in starting position.

Figure 6 is an enlarged fragmentary view, similar to Figure 5, showing the tag holder as holding a different form of tag from that shown in Figures 4 and 5.

Figure 7 is a perspective view showing the placing of the tag on the platen and the separation of the tag holding member from the platen as the tag is being placed on the platen of the machine shown in Figure 2.

Figure 8 shows the operation of the form shown in Figure 3 wherein the platen is separated by an additional movement beyond normal starting position for permitting the tags to be

2

placed on it preliminary to being held by the tag holding member.

The type of machine to which this invention is applied consists of a set of type wheels designated generally 1 shiftable about a horizontal axis to bring different numbers, or characters, to the printing line thereon at L. The type wheels are set by hand. The printing mechanism, in addition to means, not shown, for applying ink to the number set at the printing line, includes a platen 2 having a mounting as a lever 3, pivoted at 4 within the casing 5 of the machine, the platen 2 being a head or hammer carried at one end, as the upper end of the lever 3. The lever extends through a slot 14, Figure 7, in the top plate 15 of the casing. The lever 3 has an arm 6 thereon which operates mechanism for shifting the ink pad, not shown, into and out of operative position. The inking mechanism forms no part of this invention.

7 designates a holder for tags T. This is carried by the mounting or lever 3 as a unit therewith, and is movable relatively thereto. The holder is here shown as a lever pivoted on the axis 4 and biased by a spring 8 to press a lip or clamping member 9 at its outer end toward the face of the platen 2. The holder 7, as here shown, comprises a shank portion consisting of a wire strand formed with a lip 9 at its upper end, and a bracket portion 70 formed up of sheet metal and having one or more annular bearing lugs 71 mounted to rock about the axis of pin 4. The shank may be secured to the bracket 70 as by soldering or welding. The bracket is formed with a forwardly extending arm 72 to which one end of the spring 8 is anchored. The spring 8 is initially loaded or tensioned sufficiently to press the holder 7 about the axis 4 and hence, press the lip 9 toward the platen 2 and press and hold the tags T against the platen. The upper end of the spring 8 is anchored to the mounting for the platen 2, that is to the lever 3 or the rock arm 6 therein. Hence, the lever 3 and holder 7 move as a unit about the axis 4 but the holder 7 is always spring biased to press the lip against the tags. The holder is lifted manually, or otherwise, to lift the lip 9 off the tags, or the platen. The tags may be placed one by one on the face of the platen and held in position by the lip 9, or a number of tags may be placed one on the other, or stacked on the face of the platen and removed one by one as they are printed (Figure 5). The tags may be merely sheets attachable to the pieces of laundry, or dry cleaning, by stitching,

3

staples, or in any other manner or, as seen in Figure 6, the tags may be provided with staples 10 which are normally arranged astride the platen 2. The stapled tags may be arranged in a stack on the platen, or may be placed thereon one by one. The tag holder 7 is easily lifted to remove a tag from the platen after it is printed, against the spring 8 and while the operator has his hands on the handles 11 at the upper end of the lever 3 in the rear of the platen.

In the forms shown in Figures 2 and 7, the tag holding member 7 is movable relatively to the platen against the spring 8 for the purpose of placing a tag, or tags, on the platen when the platen is in starting position. As seen in Figures 3 and 8, the tags may be placed on the platen by moving the platen beyond normal starting position while the tag holding member 7 is stopped in its starting position or, in other words, the platen and its mounting have an additional or continued movement when in starting position relative to the platen 2, or its mounting 3, at which time the tag holding member 7 is held from the additional movement with the platen mounting 3. The amount of this additional movement of the platen mounting is indicated by the space S in Figures 3 and 8. The tag holding member is so stopped by an arm 12 on the tag holding member 7 and depending therefrom and located to engage a stop surface 13 on the frame, or casing, before the platen mounting 3 reaches its starting position. The platen and its mounting 3 can be moved rearward against the biasing action of the spring 8 a distance indicated by the space S thus separating the platen from the lip 9 of the tag holding member so that a tag, or tags, can be inserted thereunder. The arm 12 is here shown as an angular extension of the wire strand from which the shank of the holder is formed.

In operation, when a number is set in the type wheels 1, the tags T are placed on the platen and held thereon by the tag holder 7. The operator moves the lever 3 from the position shown in Figures 1 and 2 into the position shown in Figure 4, thus pressing the tag against the type of the printing line.

It will be understood that while the lever 3 is being moved to carry the platen toward the printing line, an inking mechanism is operated by the arm 6 to move an inking pad into and out of position to apply ink to the type at the printing line. This feature forms no part of the invention.

When a tag is printed, it can be readily removed by being pulled out from under the lip 9.

By this tag holding means, a marking machine designed for use in printing identifying characters directly on the pieces of laundry, or dry cleaning, is also useable for printing identifying characters on tags which are subsequently attached to the piece of laundry, or dry cleaning matter.

4

What I claim is:

1. In a tag printing machine, a frame; type mechanism carried thereby, a movable platen and a mounting therefor comprising an upright lever pivoted at its lower end to the frame and carrying the platen at its upper end and movable to carry the platen toward and from the type mechanism, a tag holding member comprising a lever mounted on the pivot of the platen mounting lever and having an arm extending forwardly from the pivot in the direction of movement of the platen toward printing position, the tag holding member having a lip overlying a portion of the face of the platen for holding the tags on the face of the platen, a rock arm mounted on the pivot and movable as a unit with the mounting lever, a loaded tension spring between the rock arm and the forwardly extending arm of the tag holding member to bias the tag holding member to press the lip toward the platen.

2. In a tag printing machine, a frame; type mechanism carried thereby, a movable platen and a mounting therefor comprising an upright lever pivoted at its lower end to the frame and carrying the platen at its upper end and movable to carry the platen toward and from the type mechanism, a tag holding member comprising a lever mounted on the pivot of the platen mounting lever and having an arm extending forwardly from the pivot in the direction of movement of the platen toward printing position, the tag holding member having a lip overlying a portion of the face of the platen for holding the tags on the face of the platen, a rock arm mounted on the pivot and movable as a unit with the mounting lever, a loaded tension spring between the rock arm and the forwardly extending arm of the tag holding member to bias the tag holding member to press the lip toward the platen, a stop carried by the frame in the path of movement of the platen mounting away from the type mechanism rearwardly out of printing position, and a second stop on the frame located to limit the movement of the tag holding member as the mounting lever approaches its stop and thus lift the lip of the tag holding member away from the platen against the action of the spring.

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