

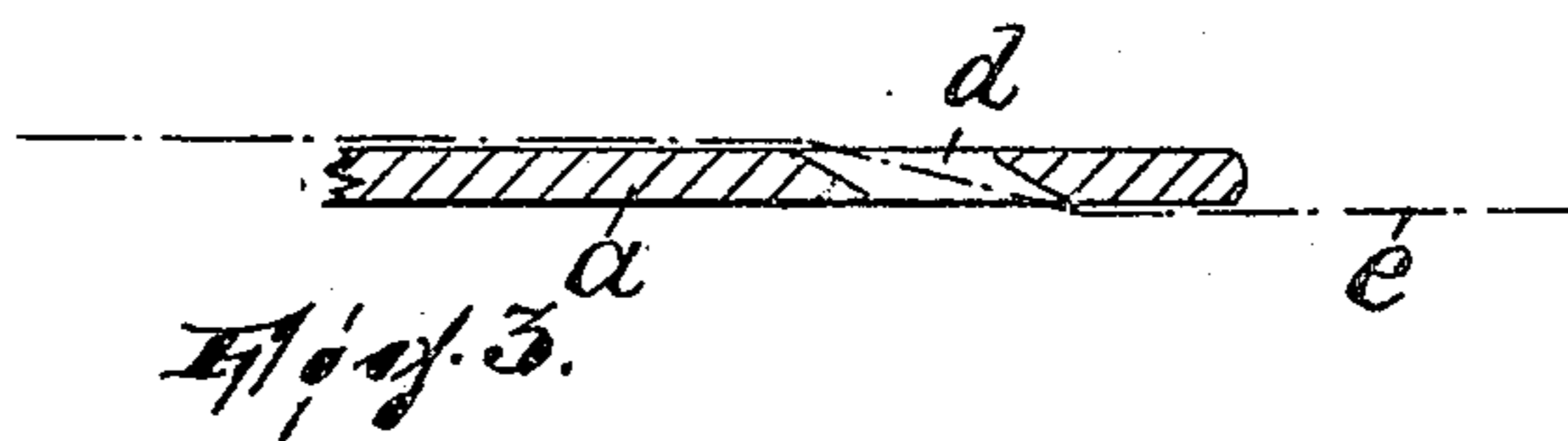
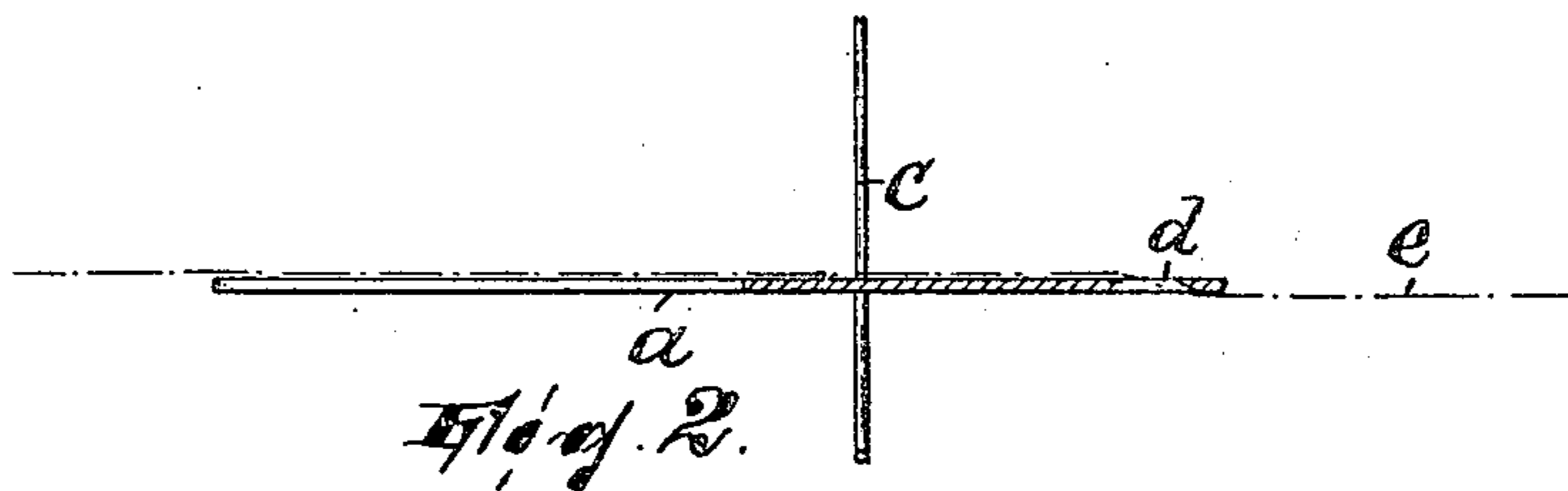
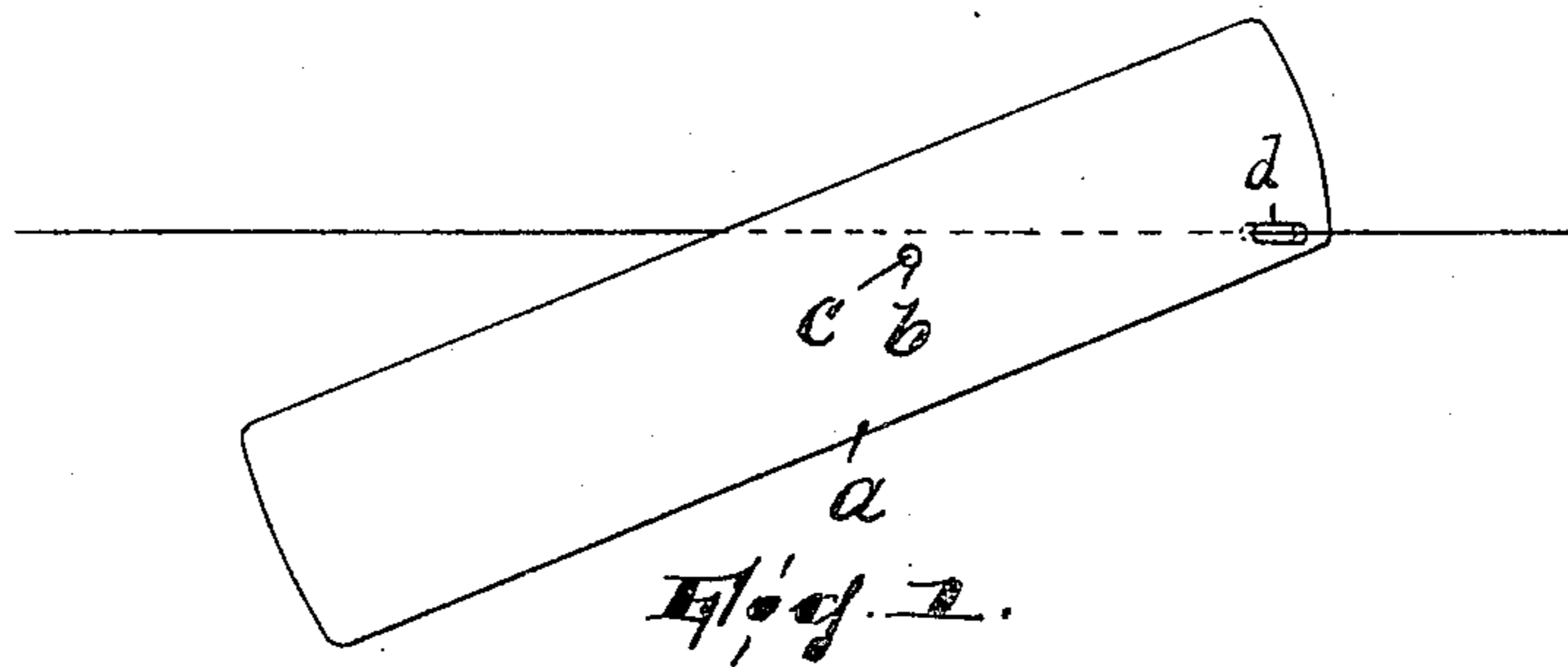
No. 808,417.

PATENTED DEC. 26, 1905.

J. B. WHITNEY.

ELECTRIC STOP MOTION MECHANISM FOR LOOMS.

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WITNESSES:

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JOSEPH B. WHITNEY, OF BROOKLYN, NEW YORK.

ELECTRIC STOP-MOTION MECHANISM FOR LOOMS.

No. 808,417.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed February 28, 1905. Serial No. 247,708.

To all whom it may concern:

Be it known that I, JOSEPH B. WHITNEY, a citizen of the United States, residing in Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Electric Stop-Motion Mechanism for Looms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention is an improvement in fallers or circuit-closers for electric stop-motion mechanisms for textile machinery. Such devices are commonly made of flat sheet metal formed quite thin, especially where they are used in connection with a warp in a loom, so as to crowd a considerable number of them into a small space, and they are formed with an aperture for the thread and if they are of the pivoted type with another for the pivot. I find in practice that notwithstanding the metal may be ever so thin a plain round thread-aperture is undesirable for at least three reasons, to wit: first, because it tends to a wearing of the thread and also of the faller near said aperture; second, because it makes the thread divert the faller out of true parallelism with the thread, and, third, because if made so large as to obviate these faults it affords too much freedom to the thread and unduly weakens or limbers the metal.

My present invention has for its object to provide a faller with a thread aperture or eyelet which will make the deflections in the thread as little abrupt as may be, and this, moreover, without deflecting any portion of the metal out of the general plane thereof, and so forming undesirable projections on the sides of the faller and without allowing undue play to the thread and weakening of the metal.

I have illustrated my improved faller in the accompanying drawings.

Figure 1 is a side view; Fig. 2, a sectional view on the thread-line in Fig. 1; Fig. 3, a magnified view of a part of what is shown in Fig. 2.

In the drawings, *a* is a faller formed with a pivoting-opening *b*, which latter is arranged, preferably, nearer one end of the faller than the other, so that there is a tendency for the

faller to assume a perpendicular position, and preferably nearer one long edge than the other, so that the faller tends to stand in a vertical plane. *c* is its pivotal support. Between the opening *b* and the nearer end of the faller is the thread aperture or eyelet *d*. *e* is a thread extending therethrough.

In carrying out my invention the surface of the eyelet at preferably opposite sides thereof and in the thread-line is formed inclined to the face of the faller, at least where said surface proximates the latter, thus having the effect of both avoiding the abrading action which results from any formation approaching a right angle at the mouth of the eyelet and of making the deflection in the thread a very gradual one. In the adaptation shown by way of illustration this is effected by forming the eyelet *d* obliquely in the faller—*i. e.*, so that the surfaces thereof at opposite points therein and in the thread-line are inclined, while parallel to each other from one face to the other face of the faller.

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

1. A faller for stop-motion mechanisms for textile machinery having a thread-aperture formed therein, said aperture having its surface at one side thereof and in the thread-line inclined to one face of the faller where it proximates the latter, substantially as described.

2. A faller for stop-motion mechanisms for textile machinery having a thread-aperture formed therein, said aperture having its surface at one side thereof and in the thread-line inclined to one face of the faller where it proximates the latter and at the other side thereof and in the thread-line inclined to the other face of the faller where it proximates the latter, substantially as described.

3. A faller for stop-motion mechanisms for textile machinery having a thread-aperture formed therein and having the material thereof, at one side of said aperture and in the thread-line, thinner than the remaining portion of the faller, substantially as described.

4. A faller for stop-motion mechanisms for textile machinery having a thread-aperture formed with one side thereof, in the thread-line, oblique to the plane of either face of the faller, substantially as described.

5. A faller for stop-motion mechanisms for textile machinery having a thread-aper-

ture formed with its opposite sides, in the thread-line, oblique to the plane of either face of the faller, substantially as described.

6. A faller for stop-motion mechanisms
5 for textile machinery having a thread-aperture formed or disposed obliquely through the faller, substantially as described.

7. A faller for stop-motion mechanisms
10 for textile machinery having an attenuated thread-aperture formed with one end surface

thereof oblique to the plane of either face of the faller, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of February, 1905.

JOSEPH B. WHITNEY.

Witnesses:

JOHN W. STEWARD,
WM. D. BELL.