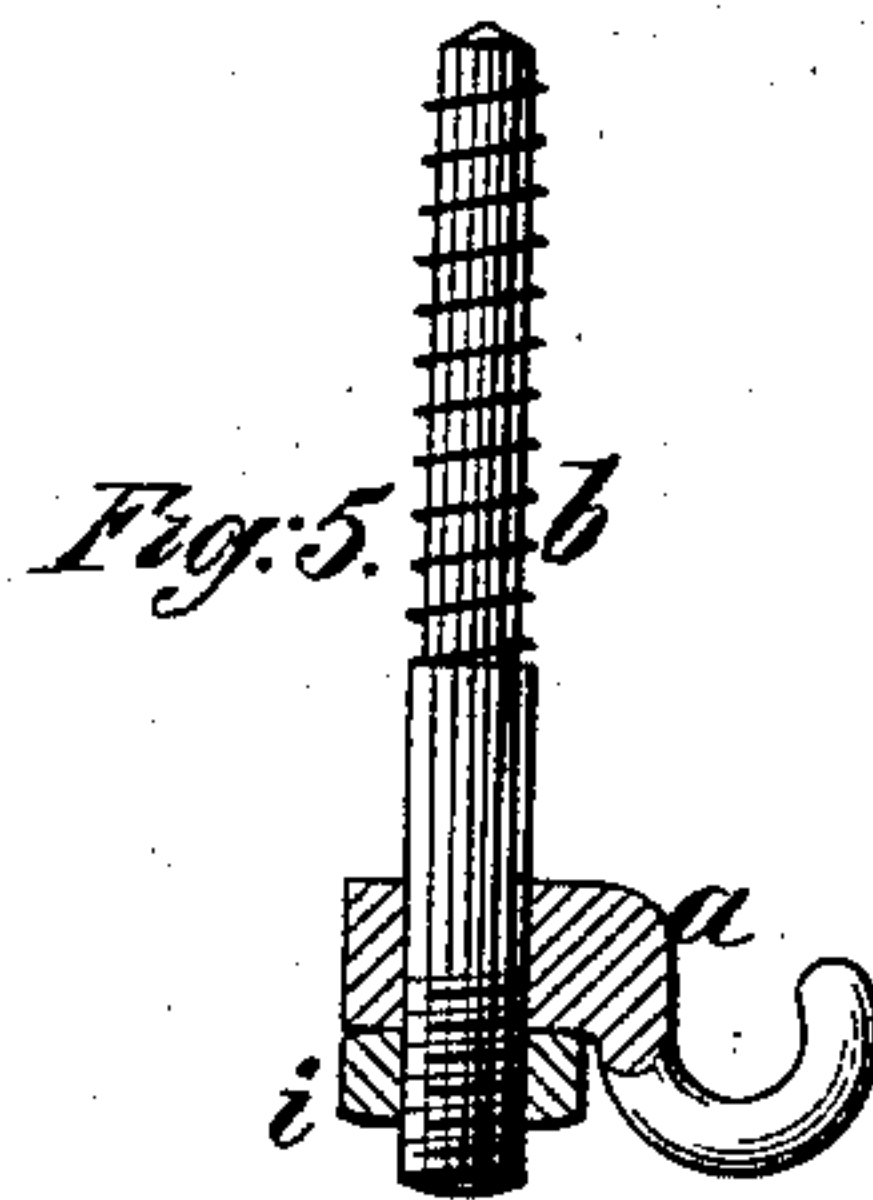
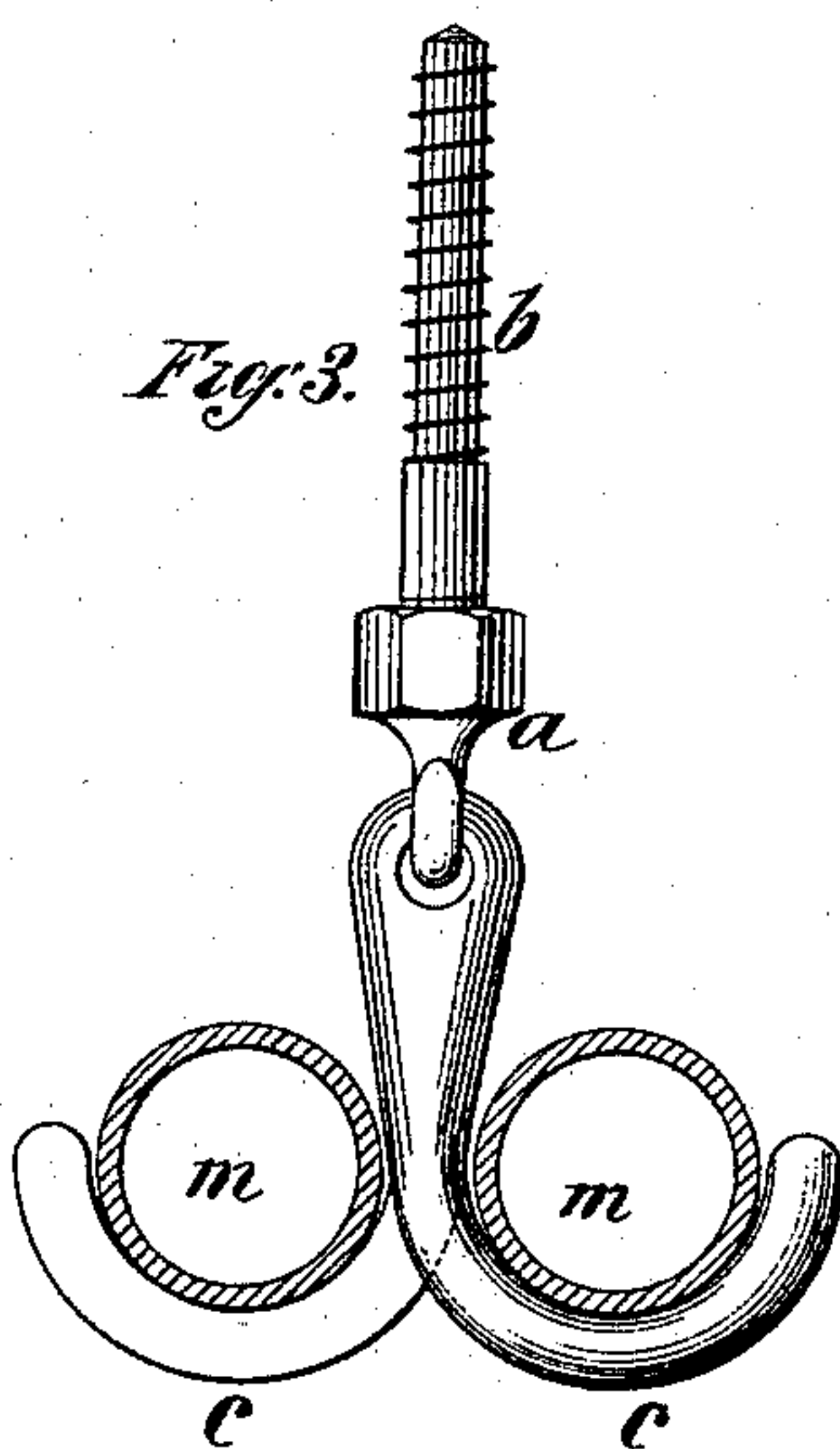
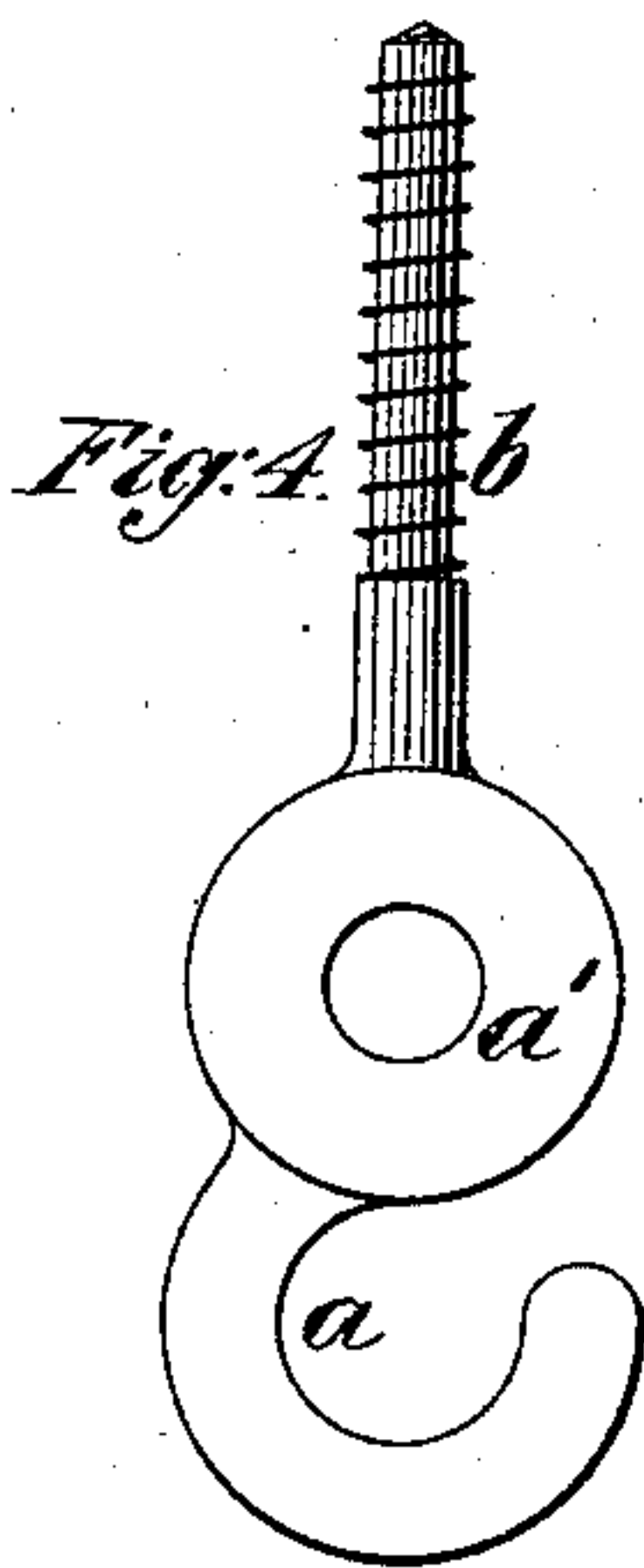
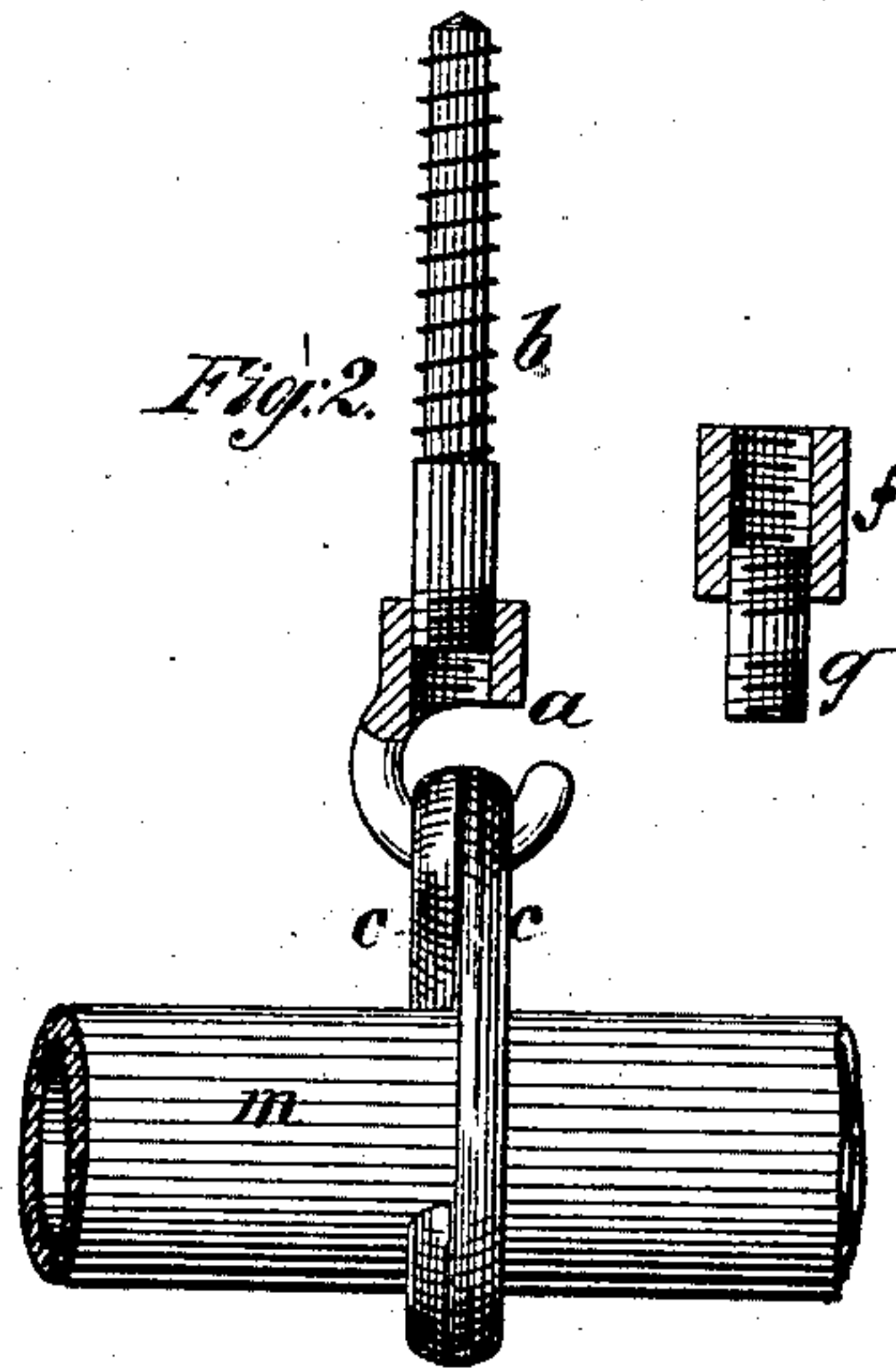
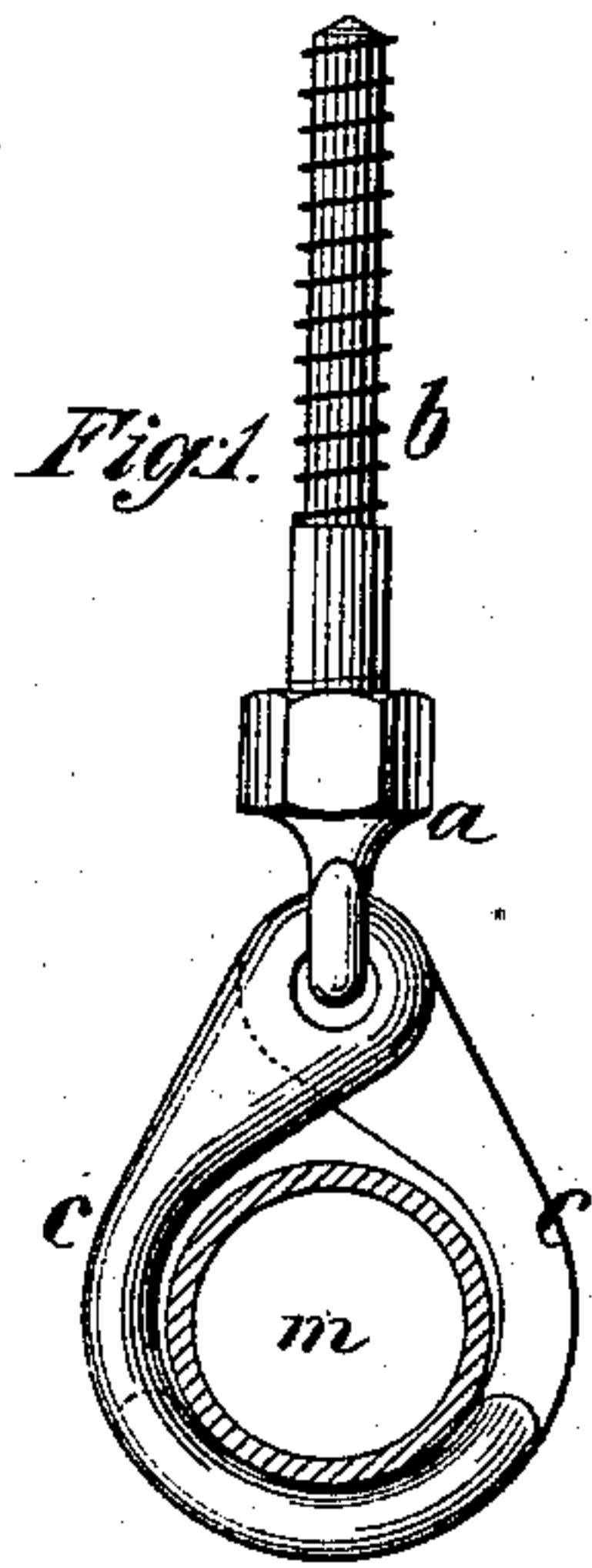


(No Model.)

H. TRASK.
PIPE HANGER.

No. 316,922.

Patented Apr. 28, 1885.



Witnesses:

C. C. Perkins.
Geo. E. Gavin

Inventor:

Harry Trask
by Chas. M. Higgins
Attorney.

UNITED STATES PATENT OFFICE.

HARRY TRASK, OF BROOKLYN, NEW YORK.

PIPE-HANGER.

SPECIFICATION forming part of Letters Patent No. 316,922, dated April 28, 1885.

Application filed October 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, HARRY TRASK, of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Pipe-Hangers, of which the following is a specification.

My invention relates to that class of devices for suspending or supporting steam or other heating or conducting pipes below floors or ceilings, or in other situations in cellars or other places, in such a way as will leave the pipes free to move in their supports by expansion or contraction.

The aim of my improvement is to provide a simple and efficient pipe-hanger, which shall admit of the pipe being easily placed in or removed from the hanger, and which may be adapted to support either a single or double line of pipes, and also have convenient adjustments for height, &c. To these ends my improved hanger may be briefly stated to consist in the combination, with a supporting device or hook adapted to be secured to the floor-beams or other fixed part, of two pendulous hooks hung from the said bracket and turned toward and overlapping each other, and adapted to clasp or encircle the pipe between them, and thus support the same in such a way as will leave the pipe free to move under expansion or contraction, and will also allow the pipe to be easily inserted or removed simply by spreading or diverging the hooks.

My invention also lies in special details of construction, as hereinafter fully set forth.

Figure 1 of the annexed drawings gives an end elevation of my improved pipe-hanger, showing a broad side view of the overlapping hooks holding the pipe, which appears in end view. Fig. 2 is a side elevation of the same partly in section. Fig. 3 is an end elevation showing the hanger adapted to hold two pipes. Figs. 4 and 5 show modifications of the supporting hook and bolt of the hanger.

Referring to Figs. 1, 2, and 3, *a* indicates the supporting hook or bracket of the hanger, which is a simple hooked lug of ordinary form, from the hub of which projects a screw-bolt or lag-screw, *b*, which may be screwed

into the floor-beams in a vertical position or into the wall in a horizontal overhanging position, as will be readily comprehended.

Upon the hooked lug *a* are hung two large pendulous hooks, *c c*, the curve of each of which includes more than a semicircle, and of a size amply large to admit the diameter of pipe for which the individual hanger may be adapted, as will be understood from Figs. 1 and 3. Each of the hooks *c* is, of course, perforated at the root end to slip over the supporting-hook *a*, while the tips of both the hooks end bluntly. The hooks *c* are preferably half-round in cross-section, with their flat sides turned toward each other and their round sides outward, as shown in the drawings, and they are hung on the hook *a* in reverse order—that is, turned in opposite directions—and overlapping each other. It will therefore be understood, referring to Fig. 1, that the hooks will hang normally into the concentric overlapping position shown in Fig. 1, inclosing a circular space between them of a size adapted to freely admit a pipe of corresponding size. If, however, the hooks *c c* are swung apart, as shown by dotted lines in Fig. 1, the pipe may be easily lifted up between the hooks, after which the hooks may be released, and will at once close together around the pipe and overlap each other beneath the pipe, as shown in Fig. 1, and therefore support the same firmly, yet in a manner which will allow the pipe free longitudinal motion due to variations of temperature. If, after the pipe is placed in the hanger, as described, it is required to remove the same, it will be only necessary to raise up the pipe slightly in the pendulous hooks, which movement will diverge the hooks, as shown by dotted lines in Fig. 1, and if the hooks are then held in their diverged position the pipe may be easily slipped down out of the grasp of the hooks, and thus easily removed from the hanger. It may now be readily observed that, not only is this hanger very simple, strong, and inexpensive in its construction, and neat and compact in form, but it is capable of being easily opened and closed on the pipe to admit or remove the same after the hanger has been fixed in place,

which latter point is a very great practical advantage, and one which is peculiar to my hanger.

The overlapping hooks *c c* are preferably made of malleable cast-iron, as is also the hooked lug *a'*. The lag-screw or bolt *b* may be of wrought-iron or steel, screwed into the hooked lug *a*, as seen in Fig. 2; or both bolt *b* and hooked lug *a* may be cast in one piece, as indicated in Fig. 4. In case the lug and bolt are formed as in Fig. 2, I render the same extensible in length by means of a coupling-sleeve, *f*, and screw-nipple, or length of pipe *g*, (shown in Fig. 2,) which will be coupled between the lug *a* and bolt *b*, as will be readily comprehended by reference to Fig. 2, thus enabling the length of the hanger below the floor-beams to be adjusted according to the distance which it is desired to have the pipes below the beams, &c., as occasion may require. A more limited means for this adjustment may be provided by constructing the bolt and lug *a* as in Fig. 5, in which case the hook of the lug *a* overhangs from one side of the hub of the lug, while the lower end of the bolt *b* passes through the hub and receives the nut *i*, whereby the lug may be adjusted up or down on the bolt, and the position of the hanger and its pipe adjusted accordingly, as will be readily appreciated.

In Fig. 4 the hub of the hooked lug *a* is modified into a large round eye, *a'*, flat on the sides, and of the same thickness as the bolt *b*. By this means the flat sides of the eye *a'* may be seized in the jaws of a wrench like a nut, so that the bolt can be readily screwed into place, or, if no wrench is at hand, a bar or pry of any kind may be inserted in the central hole of the eye, and the screw thus turned into the wood of the floor-beams or other support with great ease, thereby allowing the bolt of the hanger to be easily put in place with or without ordinary tools.

In Fig. 1 the hanger is shown adapted to hold a single pipe; but in Fig. 3 two pipes are shown held in parallel lines by the same hanger, for which purpose it is only necessary to

swing the hooks past each other, so that each hook may independently support a pipe side by side, as fully shown in Fig. 3. This adaptation of my hanger to support a single pipe or two lines of pipe is in many cases of great advantage, and is another characteristic feature of my invention.

I do not limit myself to the exact form of the bolt and lug for supporting the overlapping hooks as this supporting part of the hanger may vary considerably without departing from the essentials of my invention; neither do I limit myself to the exact form of the pendulous hooks; but

What I claim as my invention is—

1. An improved pipe-hanger formed by the combination, with a suspensory support, of two overlapping pendulous hooks hung from said support, adapted to receive the pipe between them, substantially as herein set forth.

2. A pipe-hanger formed by a supporting-lug, *a*, bolt *b*, and a pendulous hook, *c*, hung from said lug and adapted to support the pipe, substantially as set forth.

3. The combination, with lug *a* and means to fasten the same in place, of the two pendulous hooks *c c*, hung from said lug *a* and overlapping each other, substantially as and for the purpose set forth.

4. An improved pipe-hanger formed by the combination, with a fastening-bolt having a hooked head, of two pendulous hooks, *c c*, hung therefrom and overlapping each other, substantially as herein shown and described.

5. The combination of the pendulous hooks *c c*, lug *a*, and bolt *b*, and of extensible joint between the lug and bolt, substantially as set forth.

6. The combination, with the pendulous hooks *c c*, of the supporting-lug provided with a screw-bolt, said lug being made in the form of an eye, substantially as and for the purpose set forth.

HARRY TRASK.

Witnesses:

JNO. E. GAVIN,
CHAS. M. HIGGINS.