(No Model.)

H. HARBECKES.

PIPE HANGER.

No. 539,266. Patented May 14, 1895.

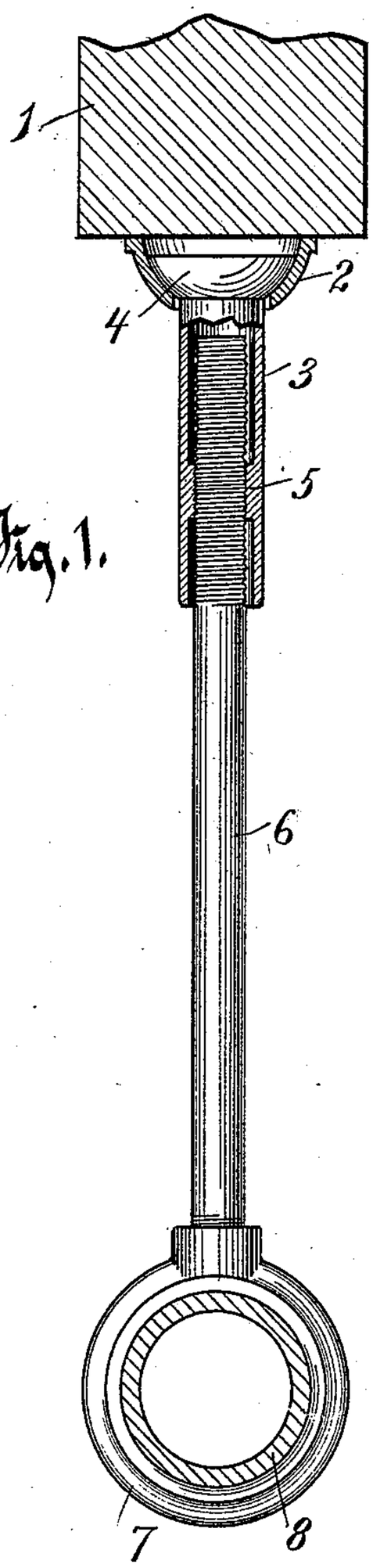

Fig. 1.

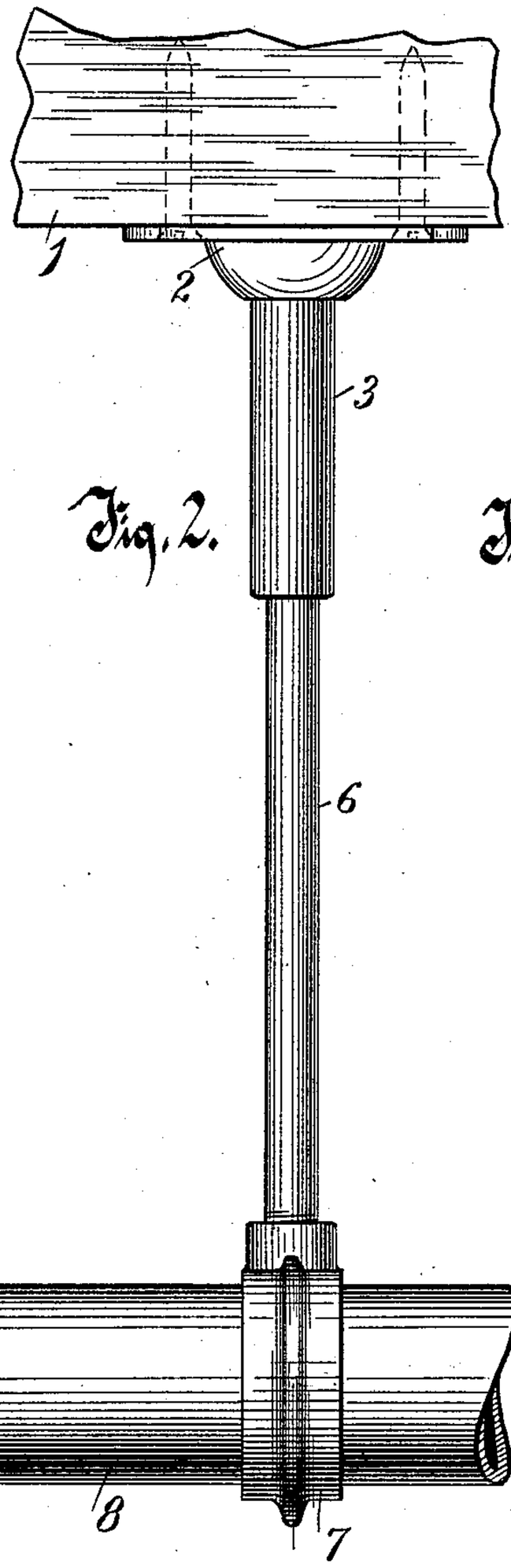

Fig. 2.

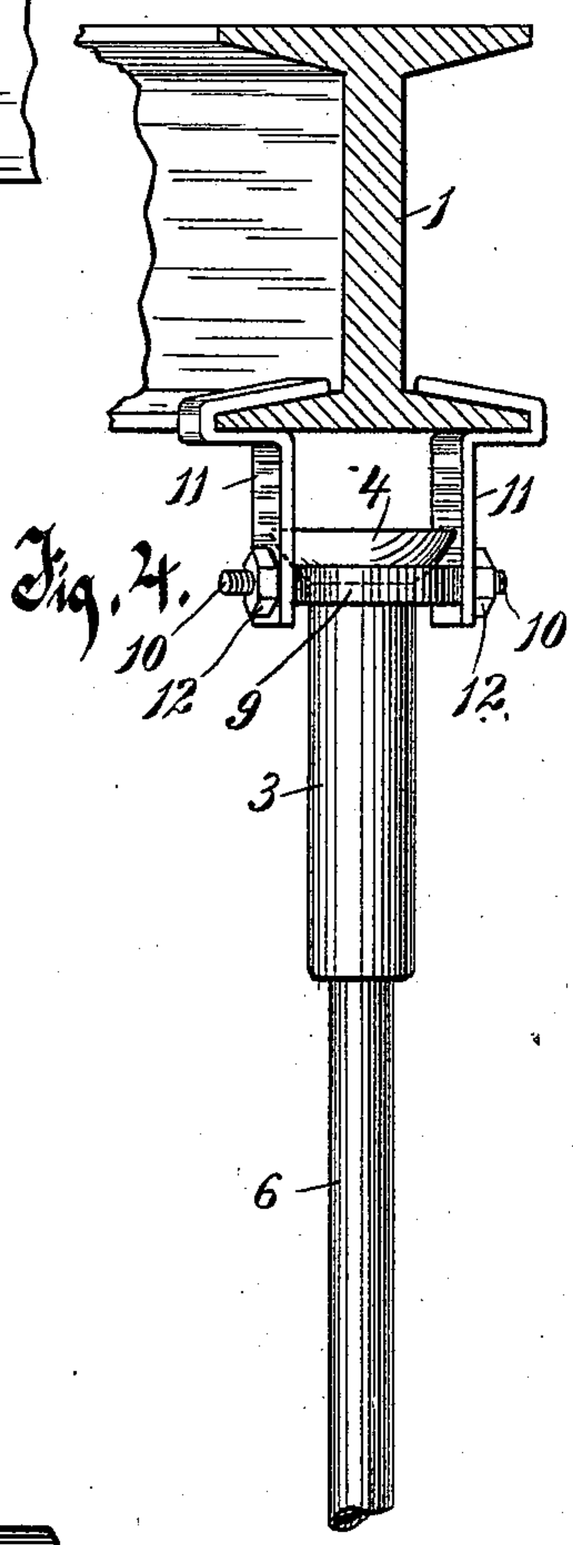

Fig. 4.

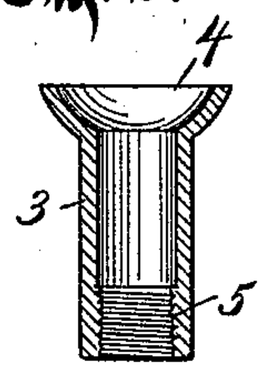

Fig. 5.

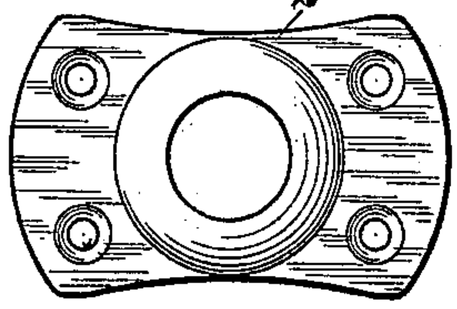

Fig. 3.

Witnesses.

C. A. Keeney

Kate Cin

Inventor.

Henry Harbeckes.

By Benedict & Morsell.

Attorneys.

UNITED STATES PATENT OFFICE.

HENRY HARBECKES, OF MILWAUKEE, WISCONSIN.

PIPE-HANGER.

SPECIFICATION forming part of Letters Patent No. 539,266, dated May 14, 1895.

Application filed January 24, 1894. Serial No. 497,847. (No model.)

To all whom it may concern:

Be it known that I, HENRY HARBECKES, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Pipe-Hangers, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in pipe hangers, and it consists in the devices and parts, or their equivalents, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical sectional view of the device properly applied to a supporting rafter or beam. Fig. 2 is an elevation at right angles to Fig. 1. Fig. 3 is a plan view of the socketed plate. Fig. 4 is a perspective view showing a modification in the means of suspending the hanger when the same is applied to an iron beam or rafter, and Fig. 5 is a detail sectional view of a modified form of one of the parts.

Like numerals of reference denote like parts throughout the several views.

Referring to the drawings, the numeral 1 indicates a beam or rafter. A plate 2, provided with a cup-shaped centrally-apertured socket, is shown in Figs. 1 and 2 as secured to the under side of the beam or rafter.

The numeral 3 indicates a tubular stem which is passed through the aperture of the socket of the plate, and is provided with a headed portion 4 which seats itself in the socket, thereby forming a means for suspending the tube in such manner as to permit of its free rotation horizontally, and also to admit of its being swung in all directions. The tube is provided interiorly and medially with a short annular screw-threaded lug 5.

The numeral 6 indicates a hanger arm, which is preferably composed of piping, cut to the proper length, and provided at opposite extremities with threads. The upper threaded end is adapted to engage the threaded lug 5, while the lower threaded end is adapted to engage the threaded socket of a supporting ring 7. The hanger arm is preferably composed of piping, for the reason that the workmen generally have tools at hand suitable for cutting threads in pipe, and also for cutting to the proper length.

The numeral 8 indicates the steam or hot water pipe supported in the ring 7. When this pipe is required to be raised or lowered at any point, it is obvious that this may be accomplished by turning the tube 3 in the direction necessary to raise the arm 6 in said tube, or lower it, as may be necessary. When the tube 3 is thus turned, it will perhaps be found necessary to hold the arm 6 against turning on the lower threads which engage the socket of the supporting ring, by means of pipe tongs, or equivalent devices.

By providing the short threaded lug 5, an adjustment sufficient for all ordinary purposes of the hanger arm 6 may be obtained, without exposing the threads of said arm, and furthermore friction is greatly reduced so as to bring the labor of turning the arm 6 to the minimum.

In case it is desired to apply the invention to an iron rafter or beam, it is impracticable to attach the plate 2 to said beam, and consequently I have devised the modified supporting medium illustrated in Fig. 4 of the drawings. Instead of the plate 2, I employ a ring 9, which supports the head of the tubular stem 3. This ring is provided at diametrically opposite points with screw-threaded arms 10, 10 which pass through openings at the lower ends of bars 11, 11, said bars being held thereon by means of locking nuts 12, 12 engaging the threads of the arms 10. The upper ends of the bars are bent into angular shape to conform to and clamp the base of the iron beam or rafter, as clearly shown in the drawings.

It will be seen from the above description that I provide a most inexpensive device for the purpose, and while exceedingly simple in operation, it yet provides for the proper adjustment of the hanger with but little expenditure of time, and without the necessity of dismantling the device, or disturbing any of the parts of the hanger.

Fig. 5 shows the tubular stem 3 much shorter than in the other figures of the drawings. This form will sometimes be necessary where a hanger of diminished length is required. In such case, it will also perhaps be found desirable to arrange the interior threads at the lower end of the stem as shown in Fig. 5.

It is the experience of all practical steam or hot water pipe fitters that by running a

main or return pipe, or any other kind of a pipe, horizontally and at a required pitch, it very often happens that the workman does not get the exact measurement for his hanger arm, as the pipe is frequently in a position where it is difficult to take a measurement. The consequence is that it becomes necessary to take the hanger arm down again, and cut it off to the proper length, when it is too long; while if it is too short it is thrown aside and may prove insufficient in length to be used anywhere else. Some careless workmen, however, where the hanger arm is cut too short, instead of taking it down again, screw said arm out as far as possible, leaving only one or two threads in the ring, or equivalent device, which supports the pipe, and then as soon as a little extra weight is put on the pipe, the threads break and the pipe drops down.

In my improved construction, it will be noticed that the upper threaded end of the hanger arm 6 has sufficient vertical movement in the tubular stem 3 to allow for the disengagement of the lower threaded end from the threaded socket of the ring 7. This is accomplished by turning the hanger arm 6 in one direction. After the lower end of the arm is uncoupled from the ring 7, said arm is then swung laterally away from the supported pipe, so as to permit it to be turned in the opposite direction and released from the threaded lug 5. The pipe 8 being supported along its length by other hangers, it will be apparent that the removal of any particular hanger arm can be accomplished without affecting the horizontal plane of said pipe. A circular support, such as 7, provided with the threaded socket, possesses an advantage over other forms of support, inasmuch as when the hanger arm is removed such circular support remains in position on the pipe, ready to be recoupled to the hanger arm, when it is again inserted in place.

It is obvious that no impediment to the free turning of the tubular stem 3 can arise, inasmuch as said tubular stem is provided with the upper rounded head 4, working in the similarly shaped recess or socket of the plate 2. This connection also permits the tubular stem to be swung to different positions, which allows the hanger arm 6 to be readily coupled to and uncoupled from the threaded lug 5.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a pipe hanger, the combination, of a device adapted to support a pipe, said device provided with a threaded socket, a part adapted for attachment to a beam, or other device, a tubular interiorly threaded stem revolubly connected with said part, and a hanger arm provided at its extremities with threads, the lower threads engaging the socket of the pipe-supporting device, and the upper threads engaging the interior threads of the tubular stem, the hanger arm adapted to be raised, when the tubular stem is turned in one direction, and to be lowered, when said stem is turned in the opposite direction, and said hanger arm, when rotation in one direction is imparted directly thereto, adapted to be unscrewed from the threaded socket of the pipe supporting device, and, when rotated in the opposite direction, adapted to be unscrewed from the tubular stem, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY HARBECKES.

Witnesses:

ARTHUR L. MORSELL,

C. H. KUNEY.