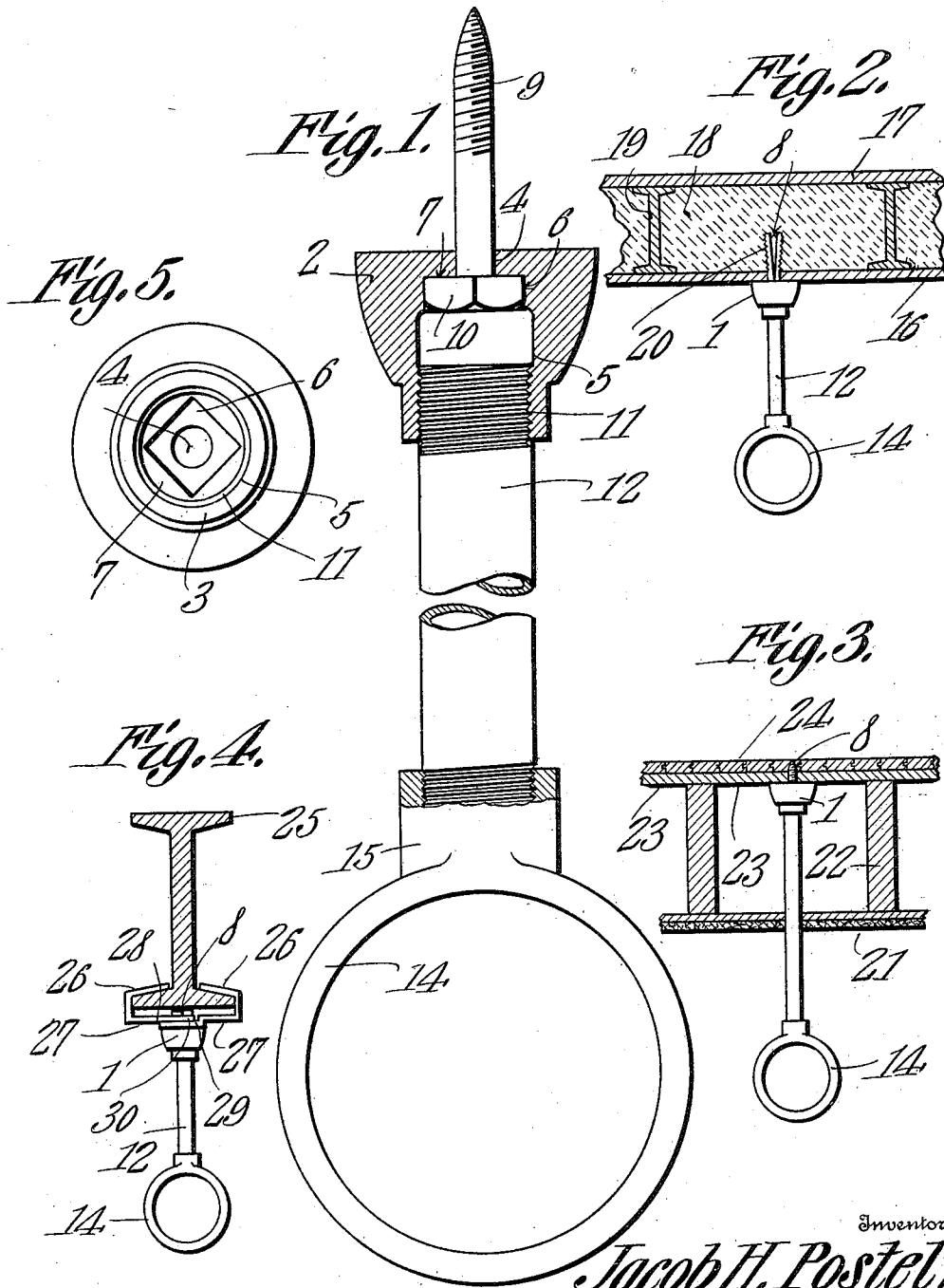


J. H. POSTEL.
PIPE HANGER COUPLING.

APPLICATION FILED JULY 13, 1909. RENEWED NOV. 25, 1910.

981,470.

Patented Jan. 10, 1911.



Witnesses

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JACOB HENRY POSTEL, OF KEARNEY, NEBRASKA.

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Specification of Letters Patent.

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Application filed July 13, 1909, Serial No. 507,394. Renewed November 25, 1910. Serial No. 594,213.

To all whom it may concern:

Be it known that I, JACOB HENRY POSTEL, a citizen of the United States; residing at Kearney, in the county of Buffalo and State of Nebraska, have invented a new and useful Pipe-Hanger Coupling, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a device of the class above described, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts.

With these and other objects in view, which a perusal of this specification will reveal to those skilled in the art, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the device, it being understood, that, within the scope of what hereinafter thus is claimed, divers changes in the form, proportions, size, and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings,—Figure 1 shows my invention in vertical transverse section, parts being left in elevation; Fig. 2 shows the invention in side elevation, the support wherewith the device is assembled, being shown in section; Fig. 3 shows the invention in side elevation mounted in a slightly different manner from the showing of Fig. 2. Fig. 4 is a side elevation of the device assembled with an eye-beam, auxiliary grips being introduced into the structure; and Fig. 5 is a bottom plan of the socket.

In carrying out my invention, I provide a socket 1, the side walls of which are imperforate. The socket 1 comprises a body 2 which is in the form of an inverted frustum of a cone, terminating at its lower end in a cylindrical neck 3. The neck and the body

are provided with an axial opening extending entirely through the socket. The upper portion 4 and the lower portion 5 of this opening are circular in transverse section, the upper portion 4 being of considerably less diameter than the lower portion 5, whereby is formed within the socket, a shoulder 7. The intermediate portion 6 of the opening, located adjacent the shoulder 7, is polygonal in transverse section.

The invention further includes a retaining member which is denoted generally, by the numeral 8. This retaining member 8 comprises a threaded shank projecting beyond the socket 1 and adapted to slide in the upper portion 4 of the opening through the socket, and to register somewhat closely therein. The shank 9 terminates in a polygonal head 10 which is adapted to register in the polygonal intermediate portion 6 of the opening through the socket, against rotation therein.

The lower portion 5 of the opening in the socket is threaded, as denoted by the numeral 11. These threads 11 extend the entire length of the neck 3 and throughout a portion of the body 2. The threads 11 terminate, however, at a distance below the lower end of the intermediate portion 6 of the opening, slightly greater than the thickness of the head 10 of the retaining element 8. The threads 11 are adapted to receive the upper extremity of a threaded member 12 which may be in the form of a piece of pipe, the lower extremity of which is threaded to fit in the collar 15 of a ring 14, the ring 14 being adapted to support the pipe line.

In applying the device, a bar may be introduced through the ring 14, or the member 12 may be grasped by a pipe wrench, and the device rotated, the polygonal intermediate portion 6 of the opening in the socket engaging the head 10 of the retaining member 8, causing the shank 9 to be advanced into the support with which the device is assembled. Owing to the fact that the threads 11 terminate below the lower end of the polygonal portion 6, the socket 1 may be slid upward upon the shank 9 to cause the head 10 of the retaining member 8 to enter the circular portion of the opening in the socket which is disposed between the upper

extremity of the member 12 and the lower extremity of the intermediate portion 6 of the opening through the socket. When the head 10 is thus positioned, the socket 1 may be rotated upon the retaining member 8 into any desired position, whereupon the head 10 may again be brought to register against rotation in the intermediate portion 6 of the opening.

I regard it as of importance that the socket 1 is of frusto-conical form. By this construction, the socket is given a broad firm base, which, being brought into close relation with the ceiling, serves as a retaining plate to hold in place any portions of the plastering of the ceiling which may have been loosened during the entrance of the threaded shank 9 thereinto.

Passing now to some of the specific applications of the device, I have shown in Fig. 2, a ceiling 16 and a flooring 17 united by eye-beams 19 between which is disposed concrete 18. When my invention is employed in connection with the floor construction of the above described nature, an opening is made through the ceiling 16 into the concrete 18, and into the opening thus formed, is introduced an expansion bolt 20 threaded upon its interior to receive the shank 9 of the retaining member, the broad base of the body 2 bearing against the ceiling and holding it in place, after the manner hereinbefore described.

In Fig. 3 I have shown a ceiling 21 spaced by beams 22 from a flooring comprising the usual rough boards 23, upon which is superposed the floor proper 24. When my invention is used with this form of floor construction, the member 12 extends through the ceiling 21, the retaining member 8 passing through the rough boarding 23 and entering the floor proper 24, the base of the body 2 being in engagement with the portion 23 of the flooring.

In Fig. 4 my invention is shown assembled with an eye-beam 25. In such instance, I provide clips comprising body portions 27, the adjacent ends of which are arranged to overlap, as denoted by the numeral 28. One of these overlapping ends is bent to form a seat 29 adapted to receive the other end, whereby the upper faces of the body portion 27 of the clips may be disposed in flush relation. Through the overlapping ends 28 is passed the upper extremity of the retaining member 8, a nut 30 being mounted upon the retaining member 8 between the overlapping ends 28 and the lower face of the eye-beam 25, the upper extremity of the retaining member 8 being adapted to bear against the lower face of the eye-beam. The remote extremities of the body portions 27 of the clips are bent upwardly, and inwardly, toward each other, to engage the

flange of the eye-beam. When the socket 1 is rotated, the retaining element 8 will be advanced to engage the lower face of the eye-beam, whereby the upper ends 26 of the clips may be drawn closely upon the flange of the eye-beam.

It will be seen from the foregoing illustration that the device is of wide application. It is peculiarly serviceable in the case determined in Fig. 3, in which the pipe line runs parallel with the joists 22. In such case it is frequently necessary to assemble the pipe-hanger with the lath and plastering of the ceiling, an uncertain and weak expedient. When the device of my invention is employed, the pipe-line need not be suspended from the fragile lath and plastering, but may be held securely by the flooring, as shown.

When it is desired to remove the piping, referring particularly to Fig. 3, the member 12 may be rotated out of engagement with the socket 1, the socket being left in place. The apertures in the ceiling may then be papered over, and, should it become necessary to replace the pipe-line, the member 12 may readily be inserted through the papering, and rotated into engagement with the socket which was left in place for its reception.

The neck 3 of the socket serves to receive and to steady the member 12, the cylindrical form of the neck reducing the weight and consequently the cost of the socket; moreover, the cylindrical neck affords a means whereby, if desired, the socket may be grasped by a pipe-wrench for rotation.

Having thus described my invention what I claim as new and desire to protect by Letters Patent is:—

A pipe hanger comprising a socket with imperforate side walls, the socket including a body in the form of an inverted frustum of a cone terminating anteriorly in a cylindrical neck, of less diameter than the adjacent end face of the cone, the neck and the body being provided with an axial opening extending entirely through the socket, the upper and lower portions of the opening being circular in cross section and the upper portion being of less diameter than the lower portion, whereby to form a shoulder within the socket, the intermediate portion of the opening, adjacent the shoulder, being rendered polygonal; a retaining member having a threaded shank to register slidably in the diminished portion of the opening and having a polygonal head to register against rotation in the intermediate portion of the opening, and to engage the shoulder against withdrawal, the lower portion of the opening being threaded throughout the entire length of the neck and throughout a portion of the body, the threads terminating

at a point removed from the lower end of the
intermediate portion by a distance slightly
greater than the thickness of the head of the
retaining member; a threaded element
5 adapted to engage at one end, the threads of
the opening; and pipe engaging means as-
sembled with the lower end of the threaded
element.

In testimony that I claim the foregoing
as my own, I have hereto affixed my signa- 10
ture in the presence of two witnesses.

JACOB HENRY POSTEL.

Witnesses:

J. A. BOYD,
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