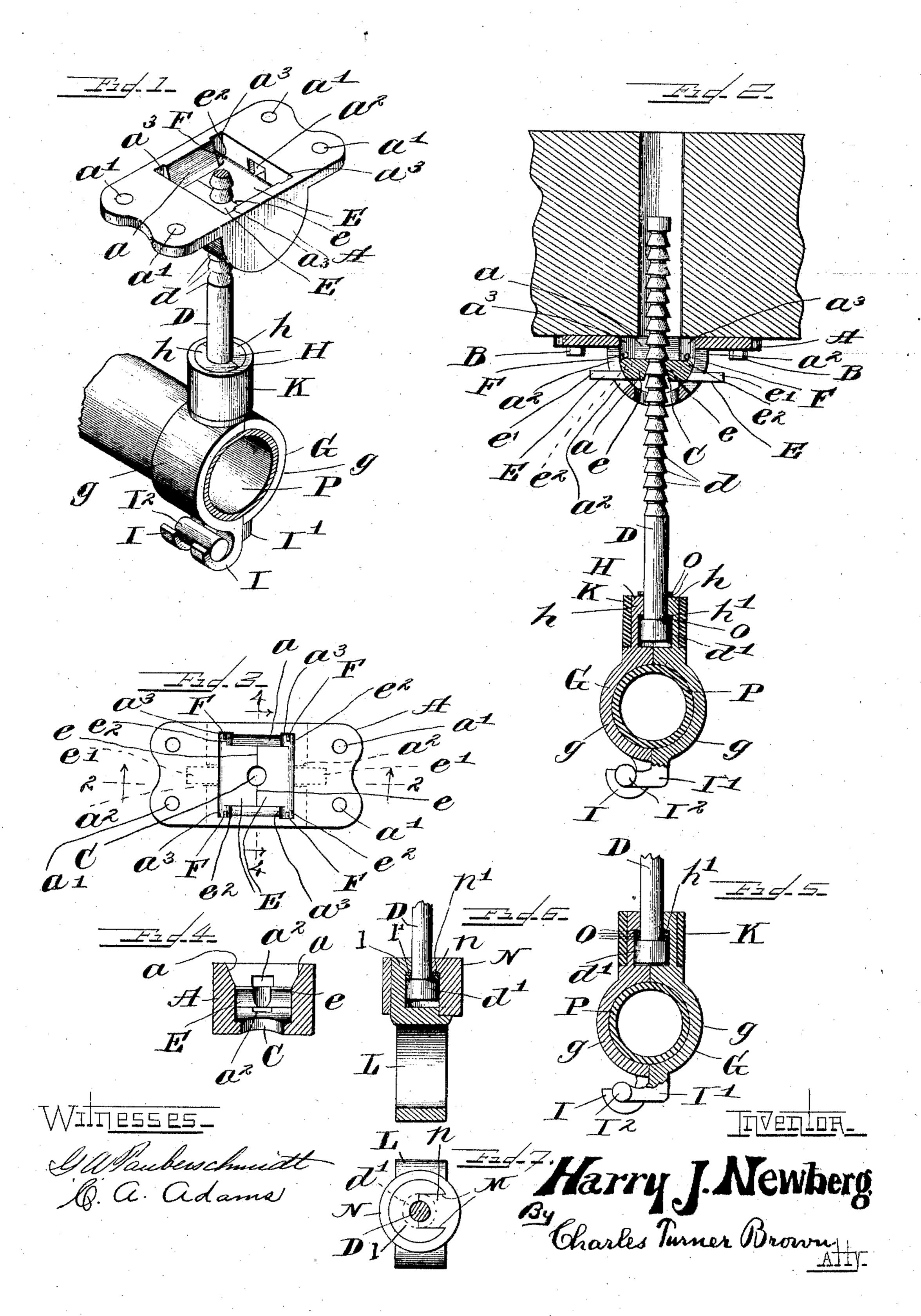
## H. J. NEWBERG. PIPE HANGER.

APPLICATION FILED SEPT. 28, 1903.

NO MODEL.



## UNITED STATES PATENT OFFICE.

## HARRY J. NEWBERG, OF CHICAGO, ILLINOIS.

## PIPE-HANGER.

SPECIFICATION forming part of Letters Patent No. 766,890, dated August 9, 1904.

Application filed September 28, 1903. Serial No. 174,934. (No model.)

To all whom it may concern:

Be it known that I, Harry J. Newberg, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pipe-Hangers, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete specification, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to that class of pipe-hangers designed to attach pipes to a vertical or horizontal wall; and the object of this invention is to obtain a pipe-hanger which may be used for attaching pipes to a beam, ceiling, or wall in a completed building, as well as in a building in course of erection, without defacing or injuring such beam, ceiling, or wall to any considerable extent.

A further object of the invention is to obtain a detachable pipe - hanger of the kind named.

A further object of the invention is to obtain a pipe-hanger for suspending pipes from a horizontal beam or ceiling, as well as for attaching pipes to a vertical wall, by means of which pipes of different diameter may readily 3° be secured in place without defacement of the beam or ceiling or of the walls; and a further object of the invention is to obtain a pipe-hanger of the kind named which will be reasonable in cost, durable, and not liable to get out of order.

I have illustrated a pipe-hanger embodying this invention in the drawings accompanying and forming a part hereof and hereinbefore referred to, in which drawings—

Figure 1 is a perspective view of a pipe-hanger embodying my invention with a short section of pipe contained in such pipe-hanger. Fig. 2 is a vertical sectional view on line 2 2 of Fig 3 of a horizontal beam or ceiling and 45 of a pipe-hanger embodying this invention attached thereto with a pipe contained in such hanger viewed in the direction indicated by the arrows. Fig. 3 is a plan view of the base (hereinafter termed "ceiling-plate") of a pipe-50 hanger embodying this invention. Fig. 4 is

a vertical sectional view of the ceiling-plate illustrated in Fig. 3 on line 4 4 of such Fig. 3 viewed in the direction indicated by the arrows. Fig. 5 is a vertical sectional view of the part or portion of the pipe-hanger em-55 bodying this invention designed to come in contact with a pipe, which is shown in cross-section therein. Fig. 6 is a vertical sectional view of a modification of the parts designed to come in contact with a pipe and a side elevation of the stem engaging therewith, and Fig. 7 is a top plan view of the modification illustrated in Fig. 6 with the stem engaging therewith shown in section.

A reference-letter applied to designate a 65 given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

A is the base or ceiling plate of the hanger. a is a recess in the back of the ceiling- 7° plate A.

a' a' represent holes in ceiling-plate A, through which bolts or lag-screws B B, Fig. 2, extend to secure such ceiling-plate to a beam, ceiling, or wall.

 $a^2 a^2$  represent holes in ceiling-plate A extending through the side walls of the recess a.

C is a hole in the ceiling-plate A through the front wall of recess a, in which hole the stem D extends, loosely fitting therein.

E E represent, respectively, latches pivotally mounted in the recess a in ceiling-plate A. The inner ends e e of the latches E E engage with notches d d on stem D, and the outer ends e' e' of such latches extend through 85 the respective holes  $a^2 a^2$  of the ceiling-plate and serve as handles by means of which such latches are brought out of engagement with the notches dd on stem D. I prefer to mount the levers E in ceiling-plate A by casting the 90 pivotal projection  $e^2$  (see Fig. 1 and dotted lines in Fig. 2) integral with the latches and arranged to fit into the grooves  $a^3 a^3$  in the recessed chamber of such ceiling-plate A and to secure such latches in place by driving the 95 pins F F thereover, as shown in Figs. 1 and 2.

By the foregoing-described construction the stem D is made removable from ceiling-plate A as well as adjustable therein.

To attach a pipe to the stem D, I have used 100

two constructions—namely, the one shown in Figs. 1, 2, and 5 and the modification thereof shown in Figs. 6 and 7. The construction illustrated in Figs. 1, 2, and 5 is attachable to 5 and removable from a pipe and from the stem D without disconnecting the pipe from its connection, while the construction illustrated in Figs. 6 and 7 requires to be placed on a pipe by inserting the end of such pipe in the 10 ring provided therefor, and hence such pipe must be disconnected to attach such construction thereto or remove it therefrom.

In the construction illustrated in Figs. 1, 2, and 5, G is a split ring provided with a hollow 15 shank H. Split ring G consists of parts g g and the hollow shank H of the parts h h. On one of the parts g g of the ring G there may be placed hooks II, and on the other of such parts may be placed the projection I', pro-2° vided with the pivotal bar or rod I<sup>2</sup>, arranged to engage with the hooks I I. In the hollow shank H, I provide the shoulders h' h', with which shoulders the shoulder of the head d'of stem D engages when the parts g g are 25 closed together thereon in the manner illustrated in Figs. 1, 2, and 5 of the drawings. K is a ring fitting over the shank H and holding the two parts h h thereof together and in engagement, as last above described, with the 3° head d' of stem D. I prefer to make split ring G and the hollow shank H of metal, either cast or pressed, so that the several parts there-

of may be integral. In the modification illustrated in Figs. 6 35 and 7 of the drawings, D is the stem illustrated in Figs. 1, 2, and 5 of the drawings, and d' is the head of such stem. L is a ring having a shank l. M is a recess on one side of shank l. Recess M is provided with a 4° shoulder l', as shown in Fig. 6, engageable with the head d' of the stem D, as illustrated in Fig. 6 of the drawings and indicated by broken lines in Fig. 7. N is a ring fitting over the shank l of the ring L. n is a pro-45 jection on the inside of the ring N, fitting the recess M of the shank l. Projection n is provided with a shoulder n', which is engageable with the head d' of the stem D when the ring N is in position over the shank l of the ring L, 5° as illustrated in Figs. 6 and 7 of the drawings. When the several parts are in the last above described position, the shank l of the ring L is securely attached to the stem D. O O represent washers on stem D, which 55 may be adjacent to the head d' thereof and so interposed between such head and the shoul-

the shoulders l' in the shank of ring L, and shoulder n' on the projection n of the ring M, 60 respectively. In Fig. 2 some of the washers O O are shown on stem Dabove split ring G, while in Fig. 5 such washers are all adjacent to the head d' of such stem. P is a pipe in split ring G.

ders h' h' in the hollow shank of the ring G,

When a pipe is to be attached to a beam,

ceiling, or wall by a pipe-hanger embodying my invention constructed as illustrated in Figs. 1, 2, 3, 4, and 5 of the drawings, the ceiling-plate A is attached to such beam, ceiling, or wall, the stem D is inserted in such 7° ceiling-plate sufficiently to permit engagement of the latches E E with the circular notches d d of such stem, and ring K is placed on such stem. The parts g g of split ring G are placed on the pipe P, so that the 75 bar I<sup>2</sup> on one of such parts is in engagement with hooks I I on the other of such parts and with the head d' of stem D in the hollow shank H. The ring K is then slipped down over the hollow shank H, holding the parts g g of 80 such hollow shank close to contact with the stem D. The pipe in the split ring is thus secured to stem D. The stem D is then forced into the base A as far as desired, where it is held by the latches E E.

When a pipe is to be attached to a beam, ceiling, or wall by a pipe-hanger embodying the modification illustrated in Figs. 6 and 7 of the drawings, the stem D, with ring N thereon, is partially inserted in ceiling-plate A, as 9° hereinbefore described, ring L is put over the end of the pipe which is to be attached to the hanger, ring N is placed over the stem D, and such stem is placed within the recess in the shank l of the ring L. Ring N is then 95 slipped down over such shank l, with the projection n in recess M and with the shoulders l'and n', respectively, in contact with the shoulder of the head d' on stem D. Stem D is then forced into the ceiling-plate A the desired 100 distance.

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

1. In a pipe-hanger, the combination with 105 a ceiling-plate provided with latches, of a stem provided with a head, such stem provided with annular abutments engageable with the latches, and a ring removably engageable with the head of the stem and engageable with 110 a pipe; substantially as described.

2. In a pipe-hanger, a ceiling-plate provided with a recess, latches in the recess, a stem provided with a head at one end and with annular ribs on the body thereof, such latches en- 115 gageable with the annular ribs when the stem is inserted in ceiling-plate, a ring through which a pipe may be extended, and means to attach the ring to the head of the stem; substantially as described.

120

3. In a pipe-hanger a ceiling-plate provided with a recess therein, latches pivotally mounted in the recess, a stem provided with annular ribs, a head at one end of the stem, such ceiling-plate provided with an aperture 125 through which the ribbed end of the stem may be put to engage with the latches, and a ring consisting of a plurality of parts attachable together and to the headed end of the bolt; substantially as described.

4. In a pipe-hanger, a ceiling-plate provided with a recess on the back thereof, and such recess provided with grooves in its end walls, with apertures through its side walls, and with an aperture through the front wall thereof, latches provided, respectively, with pivotal projections fitting loosely in the grooves of the recess and with handles extending through the apertures in the side walls of such recess, means to hold the latches in the recess.

and to permit pivotal movement thereof and a stem provided with annular ribs engageable with the latches when the stem is put through the aperture in the front wall of the recess in the ceiling-plate; substantially as described.

HARRY J. NEWBERG.

In presence of—
CHARLES TURNER BROWN,
CORA A. ADAMS.