J. COLLIS.
PIPE HANGER.

Patented Mar. 22, 1892. No. 471,348. Witnesses: Inventor: A
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## United States Patent Office.

## JOHN COLLIS, OF DES MOINES, IOWA.

## PIPE-HANGER.

SPECIFICATION forming part of Letters Patent No. 471,348, dated March 22, 1892.

Application filed December 15, 1891. Serial No. 415,153. (No model.)

To all whom it may concern:

Be it known that I, John Collis, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Improvement in Pipe-Hangers, of which the following is a specification.

My invention relates to an improvement in pipe-hangers for use particularly in buildings for suspending horizontal steam or other pipes under ceiling-beams.

My object is to provide a pipe-hanger of an improved construction which will permit the pipes to expand and contract longitudinally without material strain upon the hanger.

In the drawings, Figure 1 is a broken view in elevation showing my improved hanger in operative position upon a metal ceiling-beam, parts of the hanger being shown in section for the purpose of illustration. Fig. 2 is a section on line 2 of Fig. 1 and viewed in the direction of the arrow; Fig. 3, a broken plan view taken from line 3 of Fig 2, looking downward; and Fig. 4, a view, partly sectional, of the upper portion of my improved hanger, showing the fastening means employed for securing it to a wooden ceiling-beam.

A is a single track for the grooved wheel B. In the construction shown in Fig. 1 the track 30 A is supported between side bars t t, which are shaped, as shown, to extend at their upper end portions along the flange of an Ibeam X, and toward their lower end portions they are flared outward and provided with 35 inwardly-projecting lugs s. The track A is a hollow tube adapted at its ends to receive the lugs s. Just below the plane of the under surface of the **I**-beam X the side bars t are provided with openings to receive a tie-40 bolt r, carrying a nut r'. The grooved wheel B is provided with a shaft, which at its opposite ends is engaged by and affords a bearing for a stirrup B'. The stirrup B' extends below the track A and terminates in a threaded

45 socket  $r^2$ .

C is a yoke provided in its upper face with a threaded socket q and having ears or lugs p, recessed in their upper sides to produce sockets p'.

DD are the two side pieces or halves of a stirrup, curved throughout nearly its entire extent. The upper ends of the side pieces D

are flanged to produce flat opposing extensions o o, provided with openings o, adapted to slip over the ears p and rest in the sockets p. The lower end of one of the side pieces p is bifurcated, as shown in Fig. 3, to receive the lower flattened end of the other side piece p. The two side pieces are fastened together at their lower intermeshing ends by a cotter 50 p, which passes through coincident openings in the said side pieces. Screwed at opposite ends respectively into the sockets p and p is is a rod p.

The pipe to be supported extends through 65 the stirrup D in a line parallel with the track A. Longitudinal expansion or contraction of the pipe will cause the parts below the track A to move back and forth upon the wheel B, and thus prevent material friction.

In the construction shown in Fig. 4 the track A consists of a bolt passing through openings in the lower end portions of a stirrup-piece l. At the center of its upper side the stirrup l is provided with a lag-screw k, 75 at which it may be secured to a wooden beam Y.

The distance of the suspended pipe from the supporting-beam X or Y may be regulated by providing a longer or shorter con- 80 necting-rod m.

My improved hanger constructed as described prevents injury to the hanger from the longitudinal movement of the pipe as it expands and contracts, and it furthermore 85 affords a strong, durable, and comparatively inexpensive device for its purpose.

While the construction shown and described is the one I prefer to employ, it may be modified in the matter of details of construction 90 without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a pipe-hanger, the combination of a 95 track and means for attaching it to an overhead support, a wheel mounted upon the track to travel thereon, and a stirrup suspended from the wheel, carrying the pipe-engaging portion of the hanger, substantially as de-100 scribed.

2. In a pipe-hanger, the combination of a track and means for attaching it to an overhead support, a wheel mounted upon the track

to travel thereon, a stirrup suspended from the wheel and provided with a socket, and a rod fastened to the stirrup at said socket and carrying the pipe-engaging portion of the 5 hanger, substantially as described.

3. In a pipe-hanger, the combination, with the pipe-engaging portion thereof, of a track, a wheel mounted upon the track to travel thereon, from which the said pipe-engaging

portion is suspended, and means for securing to the track to the flanges of a beam, comprising the side bars t, tie-bolt r, and projections s, engaging the opposite ends of the track, substantially as described.

JOHN COLLIS.

In presence of—
A. S. PORTER,
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