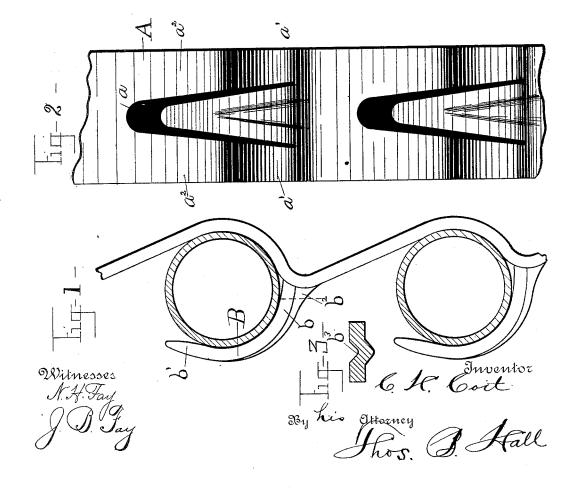
C. H. COIT. PIPE RACK.

No. 419,112.

Patented Jan. 7, 1890.



## UNITED STATES PATENT OFFICE.

CHARLES H. COIT, OF CLEVELAND, OHIO.

## PIPE-RACK.

SPECIFICATION forming part of Letters Patent No. 419,112, dated January 7, 1890.

Application filed October 31, 1888. Serial No. 289,623. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. COIT, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain newand useful Improvements in Pipe-Racks, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The object of this invention is to provide an improved form of pipe-rack adapted to support steam or other pipes in proper and 15 relative positions.

The invention consists of a rack made as

hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my rack, showing in transverse section pipes supported thereby. Fig. 2 is a face elevation of the same rack. Fig. 3 is a transverse section through one of the rack-arms on line x x of Fig. 1.

The first two figures each illustrate the invention by a mere transverse section of a rack, such section being taken out from any portion of the usual length rack, it being understood that the invention may be applied to a rack having any number of arms from

30 one upward.

The body A of the rack is formed of any suitable sheet metal, having pipe-supporting arms B, formed in single piece therewith at suitable intervals throughout its length, said 35 arms corresponding and commensurate with the openings a, formed adjacent and opposite to the same, respectively, in the rack-body. The said rack-body curves rearwardly from the base-line of any one arm B at an angle of 40 about forty-five degrees for a distance of about one-third of the total length of surface between the base-lines of two consecutive arms B, such curved portion being the two sections a', formed in the rack-body on oppo-45 site sides of the opening a, adjacent to the lower portion thereof. The rack-body curves forwardly from the upper termini of said sections a' at an angle of about twenty-five degrees for the remaining two-thirds of the total 50 length of surface between the base-lines of

tion being the two sections  $a^2$ , formed in the rack-body on opposite sides of the opening a adjacent to the upper two-thirds portion, more or less, thereof. These curved sections 55 accomplish a twofold result. They form a bed or recess in which the pipe may fit and be partially supported, thus relieving in corresponding measure the arms B from bearing the entire weight of the pipe, and they permit 60 of the bases of any two consecutive arms being located near enough together to properly support the steam-pipes at desired relative distance and in correspondence with the ordinary manifolds of steam-heating apparatus. 65

Each arm B is formed with a forwardlyprojecting lower section b and an upwardlyprojecting upper section b', such forward projection in the formation of the arm being adapted to permit of the steam-pipe being in- 70 closed between the latter and the rack-body. The arm is widest at its base, and gradually narrows toward its free upper end. It is formed with a longitudinal central rib  $b^2$ , projecting for about two-thirds of its length from 75 its base upward, such rib projecting from its outer surface, while a corresponding depression  $b^3$  is formed on the inner surface of said portion of the arm. Said rib is widest at its base, where strain falls on the arm, and 80 gradually narrows toward its upper end, where less strength is required for the arm. This strengthening-rib may be struck up by the same operation which punches or cuts out the arm from the rack-body. So, too, the 85 curvilinear sections of the rack-body, and also of the arms, may be formed simultaneously, so that the entire formation of the complete rack may be accomplished at a single operation by suitable mechanism. A strong, dura- 90 ble, and inexpensive pipe-rack is thus produced.

I claim-

1. A pipe-rack having arms in same piece with the body thereof, said body having rear- 95 ward and forward projecting formations between the bases of any two consecutive arms, substantially as set forth.

tions a' at an angle of about twenty-five degrees for the remaining two-thirds of the total length of surface between the base-lines of two consecutive openings a, such curved por-

ward curved sections on opposite sides of such openings between the base-lines of two consecutive openings, substantially as set forth.

3. A pipe-rack consisting of body A, having forward and rearward curved sections a' and  $a^2$ , arms B, having sections b and b', and also having ribs  $b^2$  and depressions  $b^3$ , all in single metallic sheet piece, substantially as set forth.

In testimony that I claim the foregoing to be my invention I have hereunto set my hand 10 this 26th day of October, A. D. 1888.

CHARLES H. COIT.

Witnesses: THOS. B. HALL, J. B. FAY.