

(No Model.)

C. HALL.
PIPE CLAMP.

No. 527,200.

Patented Oct. 9, 1894.

Fig. 1.

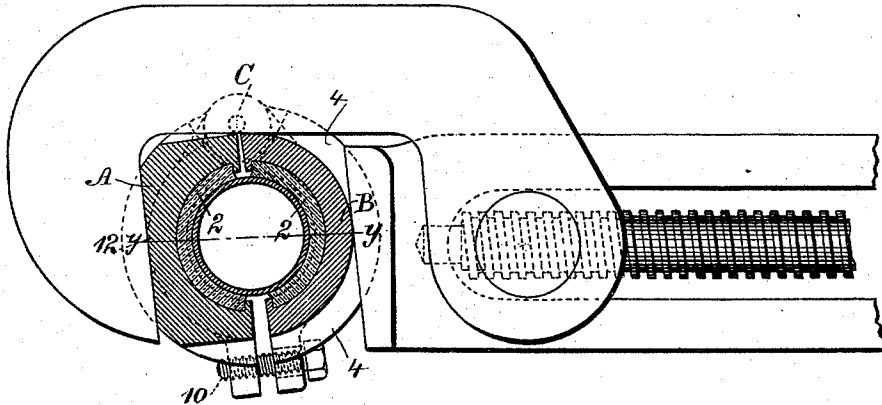


Fig. 3.

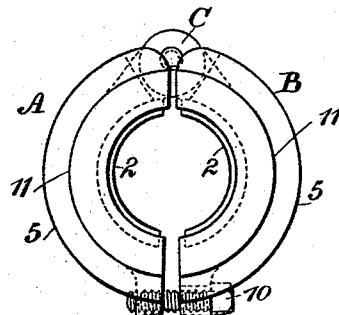
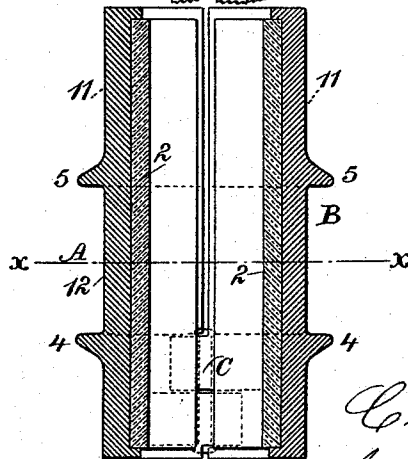


Fig. 2.



Witnesses

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PIPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 527,200, dated October 9, 1894.

Application filed May 18, 1894. Serial No. 511,661. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HALL, a citizen of the United States, residing in the city, county, and State of New York, have invented an Improvement in Pipe-Clamps, of which the following is a specification.

In the better quality of plumbing, pipes of brass and similar metal are extensively made use of, the surfaces being polished or plated, and in screwing up or unscrewing these pipes the ornamental surface is very liable to injury, and it is inconvenient for plumbers and other workmen to carry wrenches that are specially intended for pipes of this character, because such ornamental pipes are often associated with other ordinary pipes of iron or lead and the tools made use of are advantageously adapted to different characters of pipes.

The object of the present invention is to provide clamps adapted to ornamental and polished pipes, which clamps can be readily applied with ordinary pipe wrenches or screw wrenches used in connection with ordinary pipes. With this object in view I provide a clamp made in two parts with an interior lining of leather or similar yielding material, such clamp being adapted to pass in between the jaws of an ordinary wrench; and I provide separate clamps, one pair adapted to each size of pipe, and these clamps are comparatively small and occupy but little space among the workman's tools, and they are constructed in such a manner, as hereinafter described, that the wrench is not liable to slip from the clamp or the clamp to drop out from the wrench.

In the drawings, Figure 1 is a sectional view of my improved clamp, at the line *x, x*, of Fig. 2, showing the manner in which the same is applied with the jaws of a wrench. Fig. 2 is a longitudinal section of such clamp at the line *y, y*, Fig. 1. Fig. 3 is an end view of a clamp in which the two parts are hinged together.

The internal measurement of the clamp is adapted to the particular size of pipe with which such clamp is to be used, and the clamp is made of two parts A and B which may either be separate, or united by a hinge C, as represented, and the interior concave surfaces of the clamps are recessed for the re-

ception of strips of india rubber, leather or similar material, as represented at 2, such recesses being of such depth that the rubber or leather only will come into contact with the surface of the pipe to which the clamps may be applied, so as to protect the pipe from injury by the contact therewith of any of the metal portions of the clamp, and the exterior surfaces of the clamps are adapted to be received between the jaws of an ordinary pipe wrench, so that by moving the wrench in the manner usual in screwing up or unscrewing pipes, the parts of the clamp will be tightly bound upon the surfaces of the pipe, so as to rotate such pipe by the frictional contact therewith of the rubber, leather or similar material.

In applying these clamps to ornamental or polished pipes, especially where the pipe is in a vertical position, there is a risk of the clamp slipping down from between the jaws of the wrench, or of the wrench slipping off the exterior surfaces of the clamps and marring the pipe. To prevent this I provide flanges 4 5 upon the exterior surfaces of the clamp, the width between the flanges being sufficient for receiving between them the jaws of the pipe wrench, so that these flanges prevent the clamps from falling out from between the jaws of the wrench while being manipulated upon the pipe. These flanges also serve to hold the clamps in their proper relative positions within the pipe wrench when the two parts of the clamp are not hinged together, but it is usually advantageous to connect the two parts of the clamp by the hinge C, as illustrated in Fig. 3, and to employ the flanges 4 and 5 in addition, so that the wrench is passed in between such flanges when acting upon the pipe, and the pieces of rubber, leather, or similar material, being secured firmly into the recesses at the inner surfaces of the clamps, are not liable to fall out when the clamp is disconnected from the pipe, and when applied to the pipe the power to rotate the pipe is simply the frictional grasp of the clamps upon the finished or polished surface of the pipe, and hence the pipe itself is not injured in the operation.

By providing one or more screws the clamp can be applied upon the pipe and held tightly by friction and the wrench can be put around

the clamp to rotate the same and the pipe. I have shown a screw at 10 to hold the clamps together.

When the clamp is removably applied upon the pipe so as to remain in one position while the pipe is being screwed up or unscrewed, it is advantageous to make the portion 11 of the clamp cylindrical, so as to be acted upon by an ordinary pipe wrench the same as though the cylindrical portion 11 was a pipe, but when the clamp is alternately held and relieved and partly turned on the pipe between one gripping action and the next, it is advantageous to make a flat portion 12, to set against one jaw of the wrench so that the entire clamp will be moved with the wrench first one way and then the other, as the wrench handle is moved, and the wrench will cause the clamp to grasp the pipe as the handle is moved one way and the clamp will be released as the handle is moved the other way.

I claim as my invention—

1. The combination with a pipe wrench of separate movable clamps having smooth interior surfaces to come into contact with the smooth or thin pipe and projections on the exterior to come at the edges of the jaws of the pipe wrench and steady the clamps in such wrench substantially as specified.

2. The combination with a pipe wrench, of separate clamps adapted to fit upon the pipe and to be received between the jaws of the pipe wrench, such clamps having an internal lining of rubber, leather or other yielding material, a hinge for uniting the two parts of the clamp, and flanges upon the exterior surfaces of the clamps to come at opposite sides of the pipe wrench jaws, substantially as set forth.

3. The combination with a pipe wrench, of separate clamps adapted to fit upon the pipe and to be received between the jaws of the

pipe wrench, such clamps having an internal lining of rubber, leather or other yielding material, a hinge for uniting the two parts of the clamp and a screw for holding the clamp around the pipe, substantially as set forth.

4. The clamps for ornamental pipes, composed of two parts each having a lining of rubber, leather or similar yielding material within the recesses in the inner surfaces of the clamp, flanges upon the exterior surfaces of the clamps to come adjacent to the edges of the pipe wrench, and a screw for holding the parts of the clamp to the pipe, substantially as set forth.

5. The two-part clamp for smooth pipes, having an interior surface adapted to fit the surface of the pipe, means for holding the two parts of the clamp together, the exterior surface of such clamp being cylindrical to be acted upon by a pipe wrench, substantially as specified.

6. The two-part clamp for smooth or thin pipes having an interior surface adapted to fit the surface of the pipe, means carried thereby for holding the two parts of the clamp together, the exterior surface of such clamp being flat at one place to be acted upon by a wrench, substantially as specified.

7. The two-part clamp for smooth pipes, having an interior surface adapted to fit the surface of the pipe, means for holding the two parts of the clamp together, the exterior surface of such clamp being flat at one place and cylindrical at another place, so as to be acted upon by a wrench, substantially as specified.

Signed by me this 14th day of May, 1894.

CHAS. HALL.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.