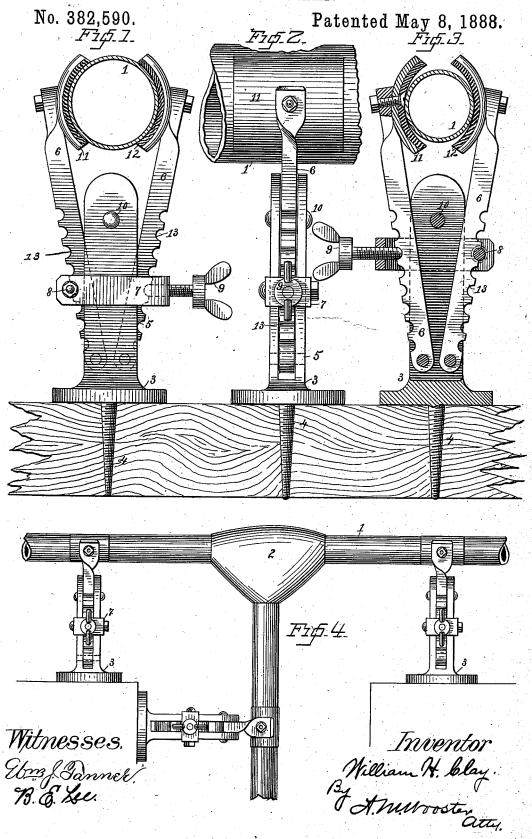
W. H. CLAY.

SOLDERING CLAMP.



UNITED STATES PATENT OFFICE.

WILLIAM H. CLAY, OF WATERBURY, CONNECTICUT.

SOLDERING-CLAMP.

SPECIFICATION forming part of Letters Patent No. 382,590, dated May 8, 1888.

Application filed February 25, 1888. Serial No. 265,316. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. CLAY, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Soldering-Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to produce a device of this class which shall be simple and inexpensive, practically impossible to get out of repair, adapted to grasp any size of pipe within reasonable limits, and to be used in any of the various positions in which it may be required to wipe a joint, it being equally adapted for use in joining two straight pieces of pipe or in making T joints, in the former instance two clamps being required and in the latter three.

With these ends in view I have devised the novel construction of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to denote the several parts.

Figure 1 is a side elevation; Fig. 2, an end elevation, and Fig. 3 a section corresponding 30 with Fig. 1. The several views illustrate the invention as applied to different sizes of pipes, and Fig. 4 is a general view showing the manner in which my novel clamps are used in making an ordinary **T**-joint.

1 denotes sections of pipe, and 2 a mass of solder by which the pipes are secured together in forming a joint.

My novel clamp consists of a base, 3, a screw, 4, projecting downward therefrom, 40 which is adapted to be turned into a box or board to hold the clamp in place; 5, the standard; 6, the jaws, and 7 the holding device. The holding device consists of a U-shaped piece of metal having a rod, 8, extending across its open side, and a thumb-screw, 9, which passes through the back of the U-shaped piece, the end of said screw being adapted to engage the back of one of the jaws.

The bifurcated standard 5 consists of two 50 separated side pieces projecting upward from the base 3, and between which are pivoted the jaws 6, said side pieces being rigidly connected near their upper ends by a cross bar

or pin,10. The grasping portions of the jaws consist of two segmental pieces, 11, prefer-55 ably lined with pieces of leather, 12. The backs of the jaws are provided with notches 13 to receive the cross rod 8 and the point of the thumb-screw 9 of the holding device 7.

In practice as many clamps are required as 60 there are pipes to support, the screws being turned into a plank or box, which is so placed as to hold the clamps in the desired position.

It of course frequently happens that the pipes are so located that the screws may be 65 turned into the wood-work of the building. It will be apparent from the drawings that when the holding device is lowered the jaws will drop apart. Having placed the clamp in suitable position, the jaws are placed on opposite sides of the pipe to be held and the holding device lifted up as far as it will go, cross rod 8 lying in a depression in the back of one of the jaws. Thumb-screw 9 is then tightened up, and of course engages the corresponding depression in the opposite jaw, as clearly shown in Figs. 1 and 3. This locks the jaws in position and clamps them firmly about the pipe. It will be seen that the device is self-adjusting to all ordinary sizes of 80 pipe.

To disengage a clamp from a pipe it is simply necessary to turn the thumb-screw backward until cross-rod 8 will slip out from the depression in which it has been lying, which 85 will permit the holding device to drop down. To grasp a pipe the jaws are simply placed on opposite sides thereof, the holding device lifted up as far as it will go, and the thumb-screw tightened up, as already fully described.

I claim-

A soldering-clamp consisting of the combination of a base, 3, having a holding screw, 4, a bifurcated standard, 5, consisting of two separated side pieces rigidly connected near their upper ends, two clamping-jaws, 6, provided with notches 13 and grasping portions 11, and a holding device, 7, having cross-pin 8 and thumb-screw 9, substantially as set forth.

In testimony whereof I affix my signature in 100 presence of two witnesses.

WILLIAM H. CLAY.

Witnesses:
THOMAS A. BARLOW,
GEO. E. FERRY.