

J. McCRYSTAL.
 COIL SCREEN CLAMP.
 APPLICATION FILED MAY 11, 1908.

900,412.

Patented Oct. 6, 1908.

Fig. 1

Fig. 2

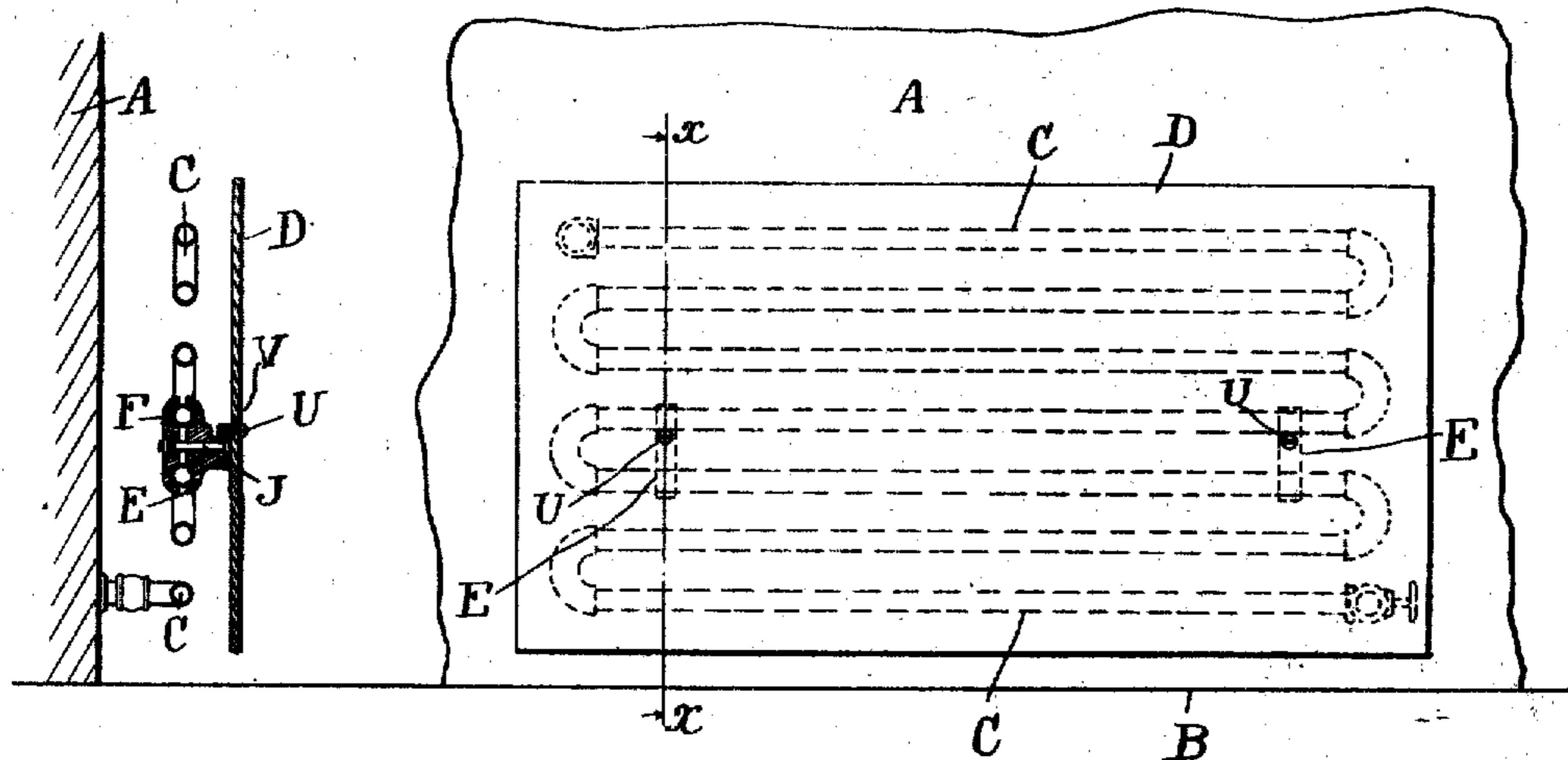
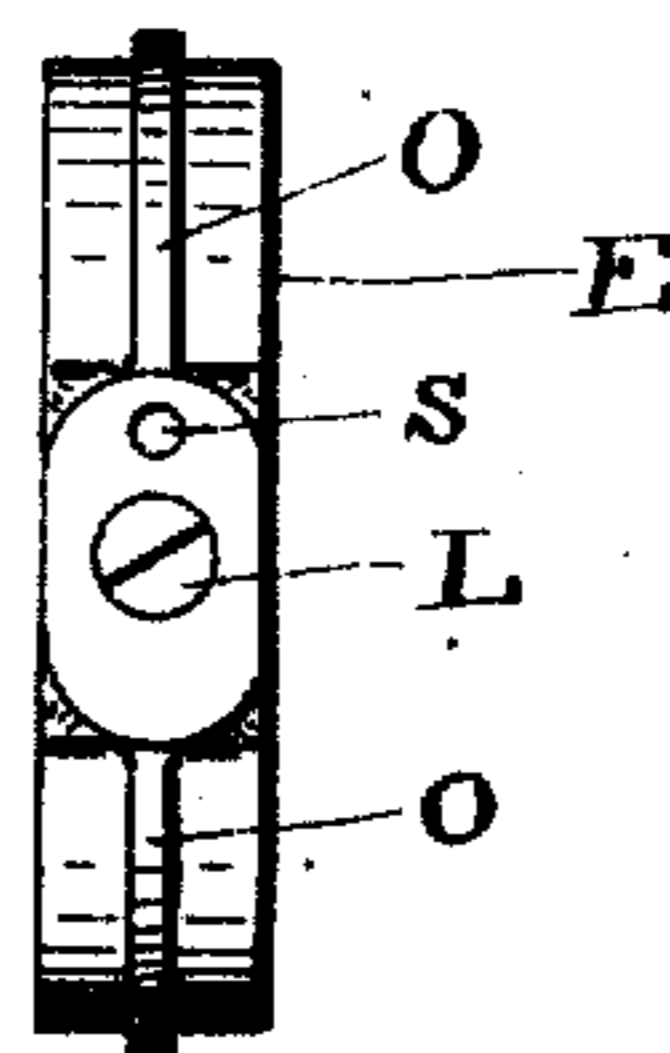
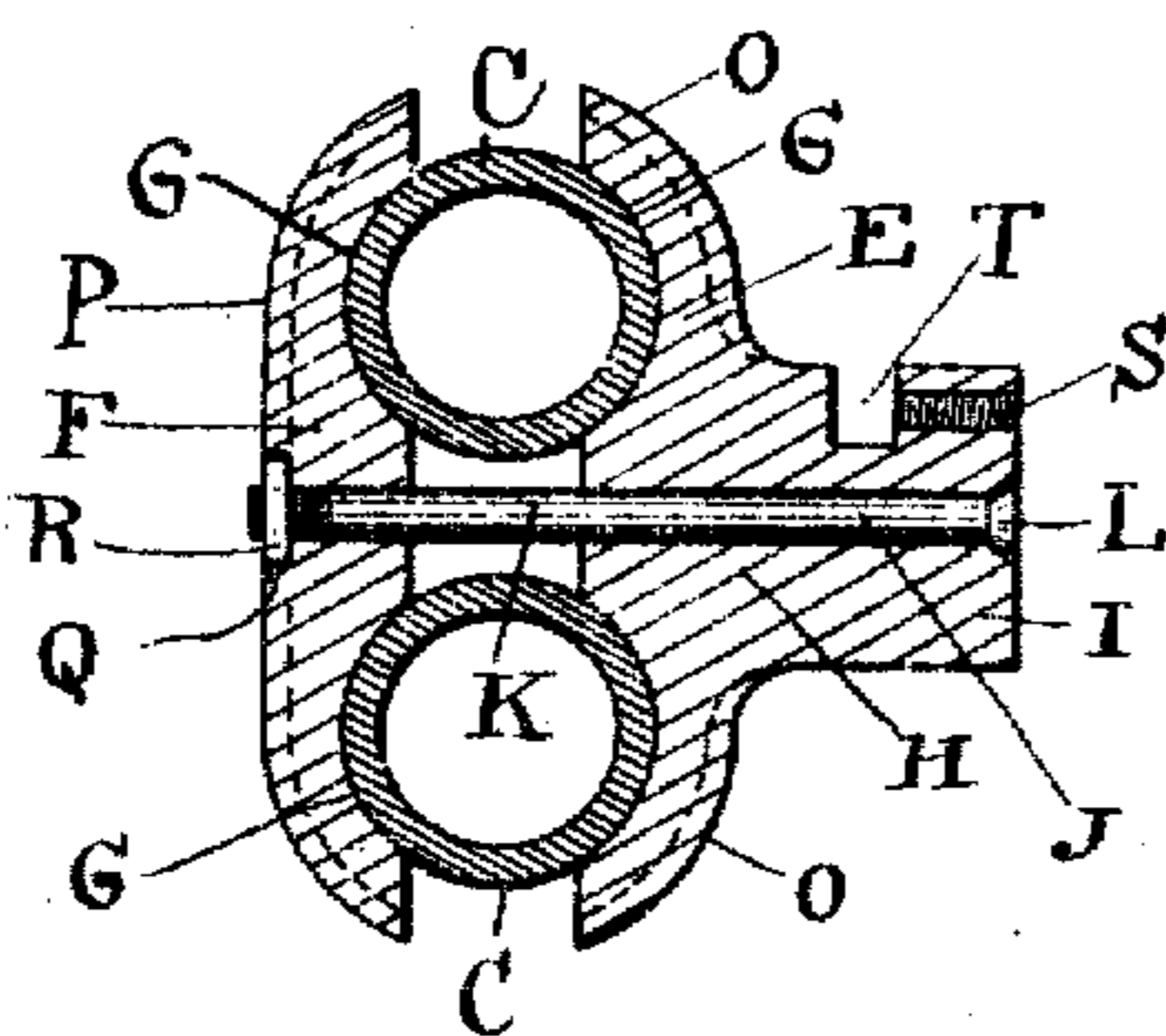


Fig. 3

Fig. 4



Witnesses:
 E. P. La Gay
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 By his Attorneys Rimmey & Ogden

UNITED STATES PATENT OFFICE.

JAMES McCRYSTAL, OF NEW YORK, N. Y., ASSIGNOR TO E. RUTZLER CO., OF NEW YORK, N. Y.,
A CORPORATION OF NEW YORK.

COIL-SCREEN CLAMP.

No. 900,412.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed May 11, 1908. Serial No. 432,070.

To all whom it may concern:

Be it known that I, JAMES McCRYSTAL, a citizen of the United States, and resident of borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Coil-Screen Clamps, of which the following is a specification accompanied by drawings.

This invention relates to clamps adapted to be adjustably secured to the pipes or coils of a steam radiator or other heater and thus afford means for supporting a screen in front of the pipes to prevent injury by contact with the hot pipes.

The objects of the invention are to secure a simple, cheap and strong clamp, which may be readily attached to or detached from the coils of pipe, and when in position will afford a ready and efficient means for supporting the screen.

Another object of the invention is to construct the clamp as a separate article of manufacture, independent from the screen, but so devised that any screen may be quickly secured to the clamps after they have been fastened to the pipes. By this means the necessity is avoided of first securing the screen to the clamps and then securing the clamps to the pipes, which is an undesirable construction, requiring an awkward manipulation of the parts in order to adjust the same.

According to my invention, the members or jaws of the clamp are easily adjusted on the coils, and after they have been tightened up, the screen is placed in position against the outer faces of the clamps and fastened in place from the outside by means of suitable screws which are inserted through apertures in the screen and seated in sockets especially provided for this purpose in the outer members of the clamps. In this way the screens may be removed or changed without loosening the clamps, which is of great advantage in many instances, notably for cleaning purposes, or in order to repair the radiator.

Further objects of the invention will hereinafter appear, and to these ends the invention consists of a device for carrying out all of the above objects, embodying the features of construction, combinations of elements, and arrangement of parts having the general mode of operation substantially as hereinafter fully described and claimed in this specification and shown in the accompanying drawings, in which

Figure 1 is a vertical sectional view of the device applied to a radiator, taken on the line *x, x* of Fig. 2; Fig. 2 is a front elevation looking at the screen supported by the clamps, and showing the heating coils in dotted lines behind the screen; Fig. 3 is an enlarged detail vertical sectional view of the clamp; and Fig. 4 is a front elevation of the clamp shown in Fig. 3.

Referring to the drawings, A represents a wall and B the floor line, while C represents the coils of a suitable radiator or other heater, in front of which the screen D is to be supported by means of the clamps shown secured or clamped to the coils of the radiator. Any suitable radiator may be utilized and I have simply shown one type in order to illustrate the construction and use of the invention.

Each clamp comprises the main member E and the supplemental or secondary member F adapted to cooperate therewith. Both members are provided with the clamping jaws G, grooved or hollowed to clasp adjacent pipe sections. The main member E comprises the body portion H, the clamping jaws G, and the outwardly extending boss I against which the screen is adapted to be secured. Both main and supplemental members are provided with the longitudinal bolt holes J through which the bolt K passes for tightening the parts of the clamp. One end of the bolt as the head L is countersunk in the outer end of the boss I in order to afford a flush surface against which the screen may be placed. Both clamping members are preferably provided with the outer strengthening webs O and P, and as shown the web P is broken or cut away at Q opposite the bolt hole J to afford a recess or seat for the nut R whereby the nut is prevented from turning. The bolt K is preferably provided with a screw head L so that the bolt may be turned by means of a screw driver and screwed into the nut R to tighten the parts.

Provision is afforded in accordance with this invention for separately and detachably securing the screen to the clamps. To this end the boss I is provided with the additional longitudinally extending internally screw threaded aperture or socket S. Preferably a slot or recess T is provided in the boss at the base of the socket in order to enable the socket to be more readily drilled and internally screw threaded. The function of the

recess or aperture T is to enable the borings to drop out. The screen D is detachably secured to the clamp by means of suitable screws, as for instance, button head screws U passing through apertures V in the screen and screwed into the sockets S in the clamps.

In using the device, the desired number of clamps are first adjusted on the heater or coils and the bolts K are tightened up to secure the clamps in place. The screen D is then placed against the clamps as indicated in Figs. 1 and 2 and fastened in place by inserting the screws V through the screen and into the sockets S in the clamps.

Obviously the screen may be removed without disturbing or dismounting the clamps, and different forms of screens may be used as desired. The clamp bolts K and screen securing screws U are entirely separate and independent and are adjusted independently of each other, so that it is not necessary as heretofore to adjust the screen and the two clamp members at the same time by means of one bolt.

I claim and desire to obtain by Letters Patent the following:

1. The combination of a coil screen clamp, comprising main and supplemental members provided with cooperating jaws adapted to be clasped about the coils of a pipe, a bolt passing longitudinally through said members and countersunk in the outer end of one member to afford a flat surface against which a screen may be held, said member which receives the countersunk end of the bolt also being provided with a separate longitudinal internally screw threaded aperture for the reception of a retaining screw for the screen, a screen, and a screw passing through the screen into said aperture.

2. The combination of a coil screen clamp, comprising a main member having a body provided with an outwardly extending supporting boss at one side and clamping jaws at the other side, a supplemental member having clamping jaws at one side adapted to cooperate with the jaws of the main member, both of said members having central longitudinal bolt holes, a bolt adapted to be inserted in said holes and having its head countersunk in the end of the outer supporting boss of the main member, and a nut on the other end of the bolt, said supporting boss also being provided with a separate internally screw threaded aperture extending inwardly from the face of the boss, to receive a retaining screw for the screen to be supported by the clamp, a screen, and a screw passing through the screen into said aperture.

3. The combination of a coil screen clamp,

comprising a main member having a body provided with an outwardly extending supporting boss at one side and clamping jaws at the other side, a supplemental member having clamping jaws at one side adapted to cooperate with the jaws of the main member and a slot or aperture at the other side for receiving a nut, both of said members having central longitudinal bolt holes, a bolt adapted to be inserted in said holes and having its head countersunk in the end of the outer supporting boss of the main member, and a nut on the other end of the bolt seated in the recess provided therefor in the supplemental member, whereby the nut is prevented from turning, said supporting boss also being provided with a separate internally screw threaded aperture extending inwardly from the face of the boss, to receive a retaining screw for the screen to be supported by the clamp, a screen, and a screw passing through the screen into the said aperture.

4. The combination with the coils of a radiator or other heater, of a screen adapted to be supported in front of said coils, one or more screen clamps supported on the coils and having said screen secured thereto, said clamps each comprising two members having jaws clamping pairs of the coils and a bolt for tightening the jaws, the bolts being countersunk in the outer members to afford flush surfaces against which the screen is placed, said outer members also having separate internally screw threaded recesses for the reception of retaining screws for the screen, and screws passing through the screen and seated in said recesses for holding the screen against the outer members of the clamps.

5. The combination of a coil screen clamp, comprising main and supplemental members provided with cooperating jaws adapted to be clasped about the coils of a pipe, a bolt passing longitudinally through said members and countersunk in the outer end of one member to afford a flat surface against which a screen may be held, said member which receives the counter-sunk end of the bolt, also being provided with a separate retaining aperture for the reception of a retaining device for the screen, a screen and a retaining device passing through the screen and seated in said aperture.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES McCRYSTAL.

Witnesses:

ERASTUS EMMETT,
JOHN E. RUTZER.