

July 19, 1932.

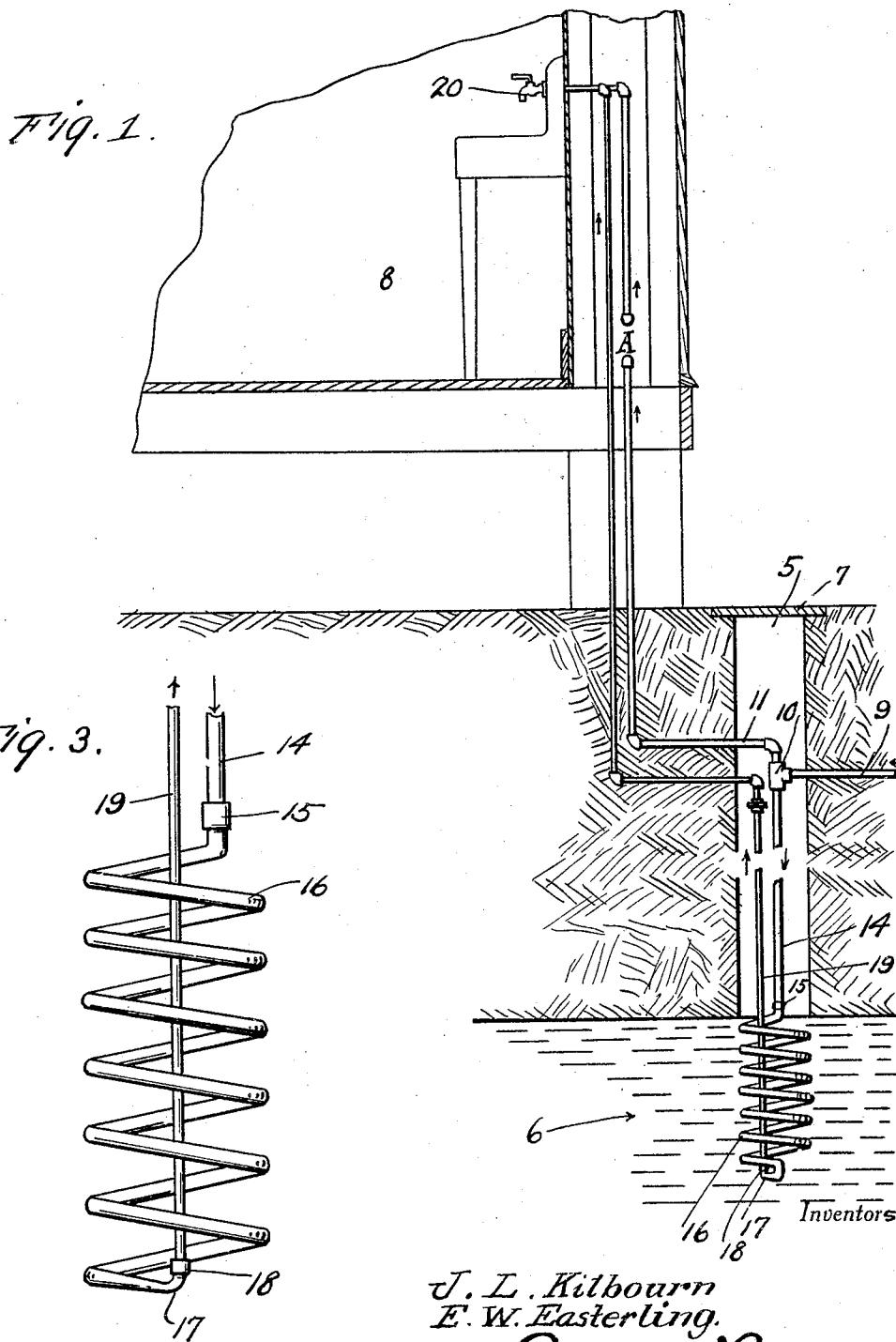
J. L. KILBOURN ET AL

1,867,975

NATURAL WATER COOLING DEVICE

Filed Aug. 19, 1930

2 Sheets-Sheet 1



J. L. Kilbourn
E. W. Easterling.

By

Clarence A. O'Brien.

Attorney

July 19, 1932.

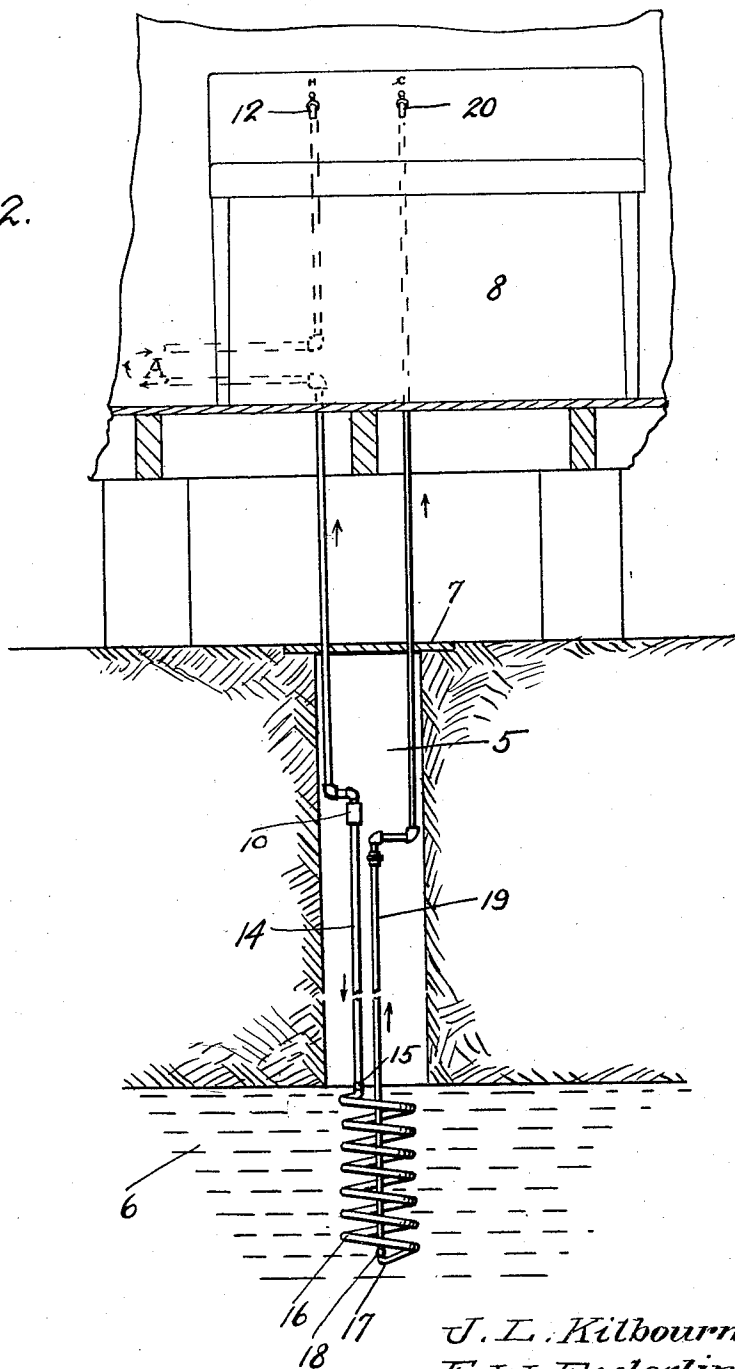
J. L. KILBOURN ET AL
NATURAL WATER COOLING DEVICE

1,867,975

Filed Aug. 19, 1930

2 Sheets-Sheet 2

Fig. 2.



Inventors

J. L. Kilbourn
E. W. Easterling.

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

JACKSON L. KILBOURN AND ELBERT W. EASTERLING, OF APPALACHIA, VIRGINIA

NATURAL WATER COOLING DEVICE

Application filed August 19, 1930. Serial No. 476,350.

The present invention has relation to means for furnishing continuous supply of cool water without the use of ice or artificial refrigeration, applicable to any water system where there is a head or pressure of water, and capable of furnishing a continuous flow of water at all times at a desired temperature for drinking purposes without any attention whatever after the first installation.

Another very important object of the invention resides in the provision of a device of this nature which is simple in construction, may be inexpensively installed, is thoroughly efficient and reliable in use and otherwise well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is a fragmentary vertical section through a portion of a dwelling and the earth thereunder showing my installation created therewith,

Figure 2 is a similar view taken at right angles to that shown in Figure 1, and

Figure 3 is an enlarged detail elevation of the cooling coil.

Referring to the drawings in detail it will be seen that the numeral 5 denotes a tubular pit leading to natural water 6 under the ground as will usually be found at varying depths. Numeral 7 denotes a cover for the pit 5. Numeral 8 denotes a room in a dwelling.

A water supply pipe 9 leads underground into an intermediate portion of the pit 5 and has connected to its end an elbow coupling 10.

A pipe line 11 is connected with the upper end of the elbow coupling 10 and leads up into the room 8 to a hot water spigot 12, it being understood that a suitable hot water heater, not shown, may be installed at A.

A pipe 14 leads down from the bottom of the coupling 10 and is connected to a socket

15 at the upper end of a coil 16 and it will be noted that the bottom end of the coil is restricted as at 17 and extends upwardly slightly and terminates in a socket 18 in which the lower end of a pipe line 19 is connected and this pipe line 19 leads up to cold water spigot 20.

The purpose of the restriction 17 is to insure a comparatively fast flowing stream of water at this point which is the lowest point of the coil thereby preventing the collection of any sediment.

It will be noted that the water enters the top of the coil and is therefore taken from the bottom of the coil insuring cold water at the spigot 20 when the same is turned on.

It is thought that the construction, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiment of the invention has been described in detail merely for the purposes of exemplification since in actual practice it attains the features of advantages enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described our invention, what we claim as new is:

In a natural water cooling device of the class described and in combination with a well, a vertically disposed coil located in the water in the well and the lower end of which is restricted and merges into a riser, means for connecting a water supply line with the upper end of the coil and a water feed line rising from said riser and connected thereto.

In testimony whereof we affix our signatures.

JACKSON L. KILBOURN.
ELBERT W. EASTERLING.

95

100