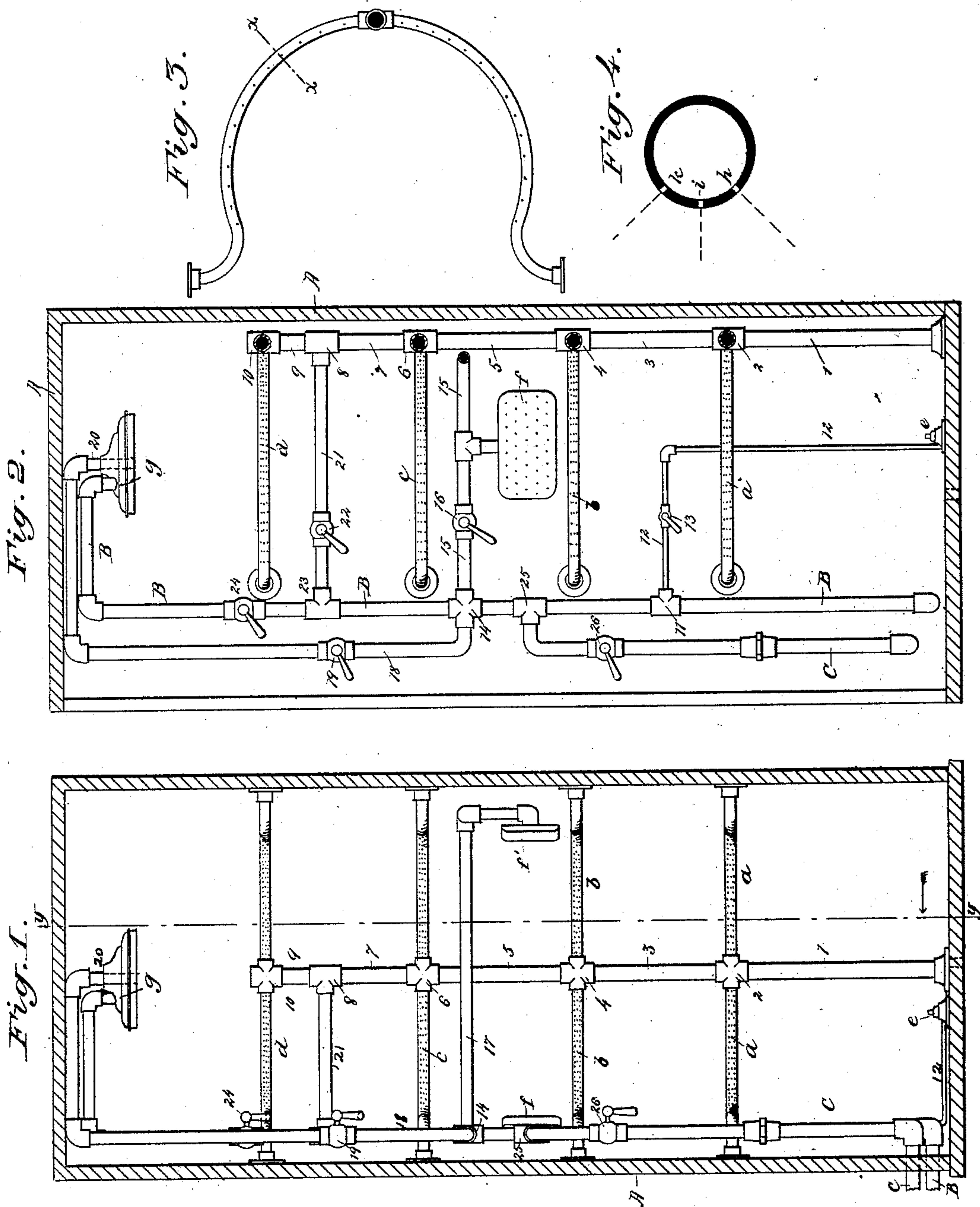


(No Model.)

V. A. HARDER.
BATHING APPARATUS.

No. 336,642.

Patented Feb. 23, 1886.



Attest:

Andrew W. Steiger,
G. Felbel.

Inventor:

Victor A. Harder,
By Jacob Felbel,
Atty.

UNITED STATES PATENT OFFICE.

VICTOR A. HARDER, OF NEW YORK, N. Y.

BATHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 336,642, dated February 23, 1886.

Application filed July 31, 1885. Serial No. 173,135. (No model.)

To all whom it may concern:

Be it known that I, VICTOR A. HARDER, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Bathing Apparatus, of which the following is a specification.

My invention relates to the kind of bathing apparatus made the subject of another application filed by me, and has for its main objects the production of an apparatus of simpler construction, more convenient of operation, and one not open to the objection sometimes urged against the apparatus as heretofore made.

The apparatus shown and described in my said other application is provided with a hot and a cold water branch pipe for each and every form of bath, and with a cock for each branch to control the supply of water, and the construction is such that either a hot-water, or a cold-water, or a mixed hot and cold water bath may be taken. Against this construction of apparatus the objection is sometimes raised that the bather, if he be inexperienced or careless, or without an attendant familiar with the working of the apparatus, may open only the cock to any of the hot-water (or steam) pipes, and in consequence be severely scalded. The experienced and careful bather or attendant, it will be understood, will never turn on the hot water (or steam) without also turning on the cold water, thus mixing them and affording a tepid-water bath.

To guard against accidental scalding of the bather is the most important object of my present invention; and to this end I employ only one hot-water pipe, and so arrange it that the water therefrom must encounter and mix with the cold water before it can escape from any of the devices giving the various kinds of baths, all as will be hereinafter more fully explained.

In the drawings which accompany this specification and form a part thereof, Figure 1 represents a front elevation (with the cabinet in section) of a bathing apparatus involving my invention. Fig. 2 is a vertical section taken at the plane represented by the line *y y* of Fig. 1, and looking in the direction of the arrow. Fig. 3 is a detail plan view of a needle-spray pipe and coupling. Fig. 4 is an enlarged section of the needle-spray pipe, taken at the line *x x* of Fig. 3.

In the several views the same part will be found designated by the same letter or number of reference.

The apparatus is shown fitted within a cabinet, A, after the manner shown in my said other application.

1 is a solid standard secured to the floor of the cabinet, and serves to support at the rear thereof the needle-spray pipes and connections. To the upper end of the standard is secured the lower branch of a cross T-coupling, 2, the upper branch of which joins a pipe, 3, the upper end of which connects with the lower end of a four-way coupling, 4. A pipe, 5, joins the coupling 4, and at its upper end connects with a four-way coupling, 6, from which extends a pipe, 7, to the upper end of which is screwed a T-coupling, 8. A pipe, 9, extends from the coupling 8, and joins a three-way coupling, 10, all as plainly shown.

a, b, c, and d represent needle-spray pipes, preferably of the curved form shown. The outer ends of each of the pipes *a b c d* are secured to the walls of the cabinet, and the inner ends to the couplings 2, 4, 6, and 10, respectively. As will be seen, the needle-spray pipes are arranged in vertical series about equal distances apart, and are each provided with a series of minute apertures to discharge fine spray upon the bather. Each needle-spray pipe is made with three horizontal rows of perforations, and the perforations of the rows are so disposed as to emit diverging streams of water.

From the sectional view shown at Fig. 4 it will be seen that all the perforations *h i k* radiate from the center of the pipe, and that hence the streams discharging therefrom will be directed over a larger surface of the bather's person. This is an important fact, and is one of the several features of my improvements.

B is the cold-water-supply pipe, and C the hot-water or steam supply pipe of the apparatus, both located, preferably, at the right-hand side of the cabinet and at its front.

From the pipe B at the coupling 11 extends a branch pipe, 12, running backwardly,

downwardly, and to about the center of the cabinet, where it is connected to a device, *e*, for giving an ascending douche. The pipe 12 is provided with a cock, 13, for controlling the supply.

From one horizontal arm of a four-way coupling, 14, in the pipe B, extends backwardly a pipe, 15, (provided with a cock, 16,) connecting with a liver-spray device, *f*, at the right-hand side of the cabinet, and to an extension of the pipe 15 is connected a pipe, 17, which extends transversely across the back of the cabinet, but forward of the pipe 5, thence toward the front, and is joined to a liver-spray device, *f'*, at the left-hand side of the cabinet, and which is located opposite the one marked *f*. From the other horizontal arm of the four-way coupling 14 runs upwardly a pipe, 18, provided with a cock, 19, which is connected at 20 with a device situated centrally in the cabinet for giving a descending douche. A pipe, 21, provided with a cock, 22, is coupled at 23 with the pipe B, and with the pipe sections and coupling 7 8 9, and conducts the water to the needle-spray pipes. The pipe B extends along up to the shower-giving device *g*, and is provided at 24 with a cock for controlling the supply of water to said device. The hot-water-supply pipe C connects with the cold-water-supply pipe at the coupling 25, and is provided with a cock, 26.

It will be seen from the drawings that when all the cocks are closed the cold water will fill the pipe B to the cock 24, the pipe 12 to the cock 13, the pipe C to the cock 26, the pipe 15 to the cock 16, the pipe 18 to the cock 19, and the pipe 21 to the cock 22; and if it be desired to take a cold bath of any particular kind, the cock in the pipe connecting with the device for giving that kind of bath is opened, and the water thus permitted to discharge.

If it be desired to take a tepid-water bath, the cock 26 is opened, and also such other cock or cocks as may control the supply or supplies to the device or devices for giving the kind of bath or baths wanted. For example, suppose the bather desires a tepid needle-spray bath. The cock 26 is opened, and the hot water permitted to mix with the standing cold water, after which the cock 22 is opened, and the tepid water will flow through the pipe 21 out into the needle-spray pipes *d*, *e*, *b*, and *a*, and be discharged inwardly in diverging sprays upon the body of the bather.

It will be seen that by connecting the hot-water pipe with the cold-water pipe the hot water is compelled to mix with the cold water before it can issue from any point in the bath,

thus providing against the scalding of the bather by accident or carelessness.

The bathing apparatus herein shown and described is simpler in construction than that made the subject of my other application, and is more convenient of operation, because, it will be observed, there are a less number of cocks to manipulate, and they are all located at one side and at the front of the cabinet, where an attendant may reach them with facility and without disturbing the bather.

Of course the apparatus may be fitted up in a room, without a cabinet.

Having now so fully explained my invention that those skilled in the art to which it relates may make and use the same, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a cold-water-supply pipe provided with a cock, of a hot-water-supply pipe entering said cold-water-supply pipe, and having its discharge controlled by the cock in said last-mentioned pipe, whereby the hot water is compelled to mix with the cold water, as and for the purpose set forth.

2. The combination, with a cold-water-supply pipe provided with a cock, of a hot-water-supply pipe entering said cold-water supply pipe in rear of its discharging-point, whereby a mixture of hot and cold water is insured.

3. In a bathing apparatus, the combination, with the cold-water-supply pipe having branches leading to devices for giving various baths, said branches being provided with cocks for controlling the supplies, of a hot-water-supply pipe, provided with a cock entering said cold-water-supply pipe in rear of the controlling-cocks, whereby when the hot water is turned on a mixture of hot and cold water is insured, as set forth.

4. The combined arrangement of the cold and hot water supply pipes, provided, respectively, with cocks 24 and 26, the ascending douche device, the liver-spray devices, the descending douche device, the shower-giving device, the vertical series of needle-spray pipes, and the pipes 12, 15, 17, 18, and 21, provided with cocks 13, 16, 19, and 22, all of the said cocks being located at the front and at one side of the apparatus, as and for the purpose set forth.

Signed at New York, in the county of New York and State of New York, this 30th day of July, 1885.

VICTOR A. HARDER.

Witnesses:

JACOB FELBEL,
G. FELBEL.