G. E. CLAPP.

FAUCET.

APPLICATION FILED NOV. 14, 1910.

993,758. Patented May 30, 1911.

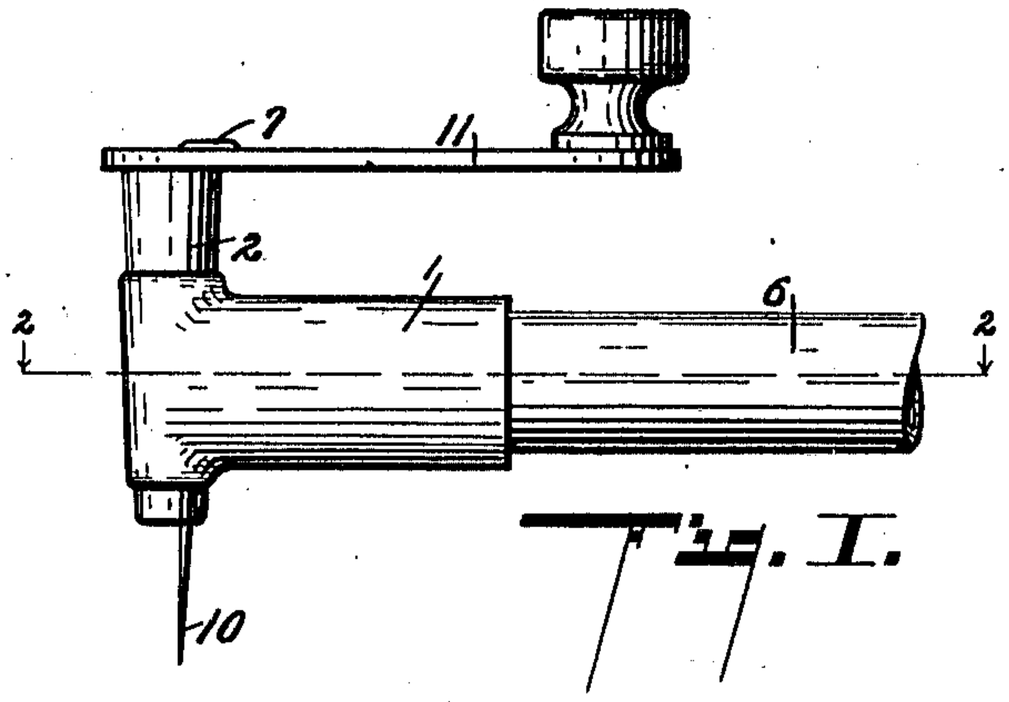

Fig. I.

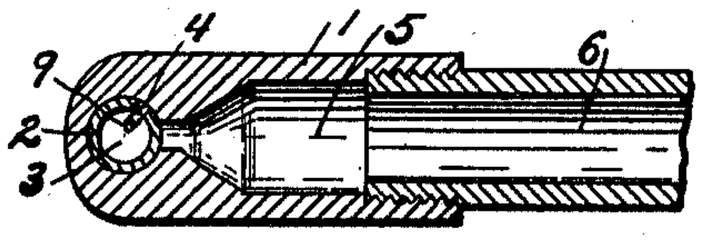

Fig. III.

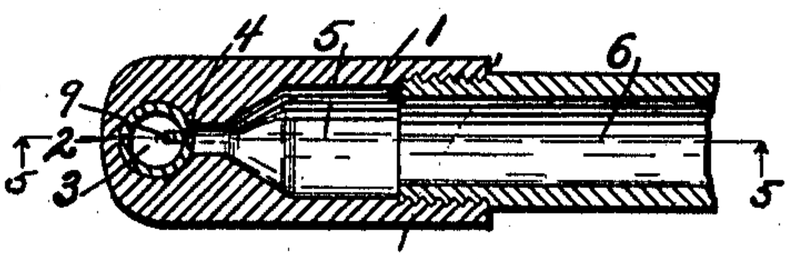

Fig. II.

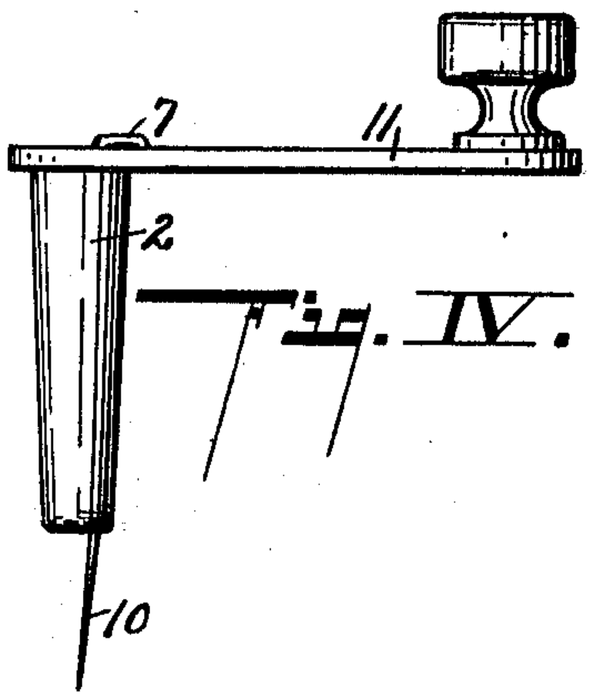

Fig. IV.

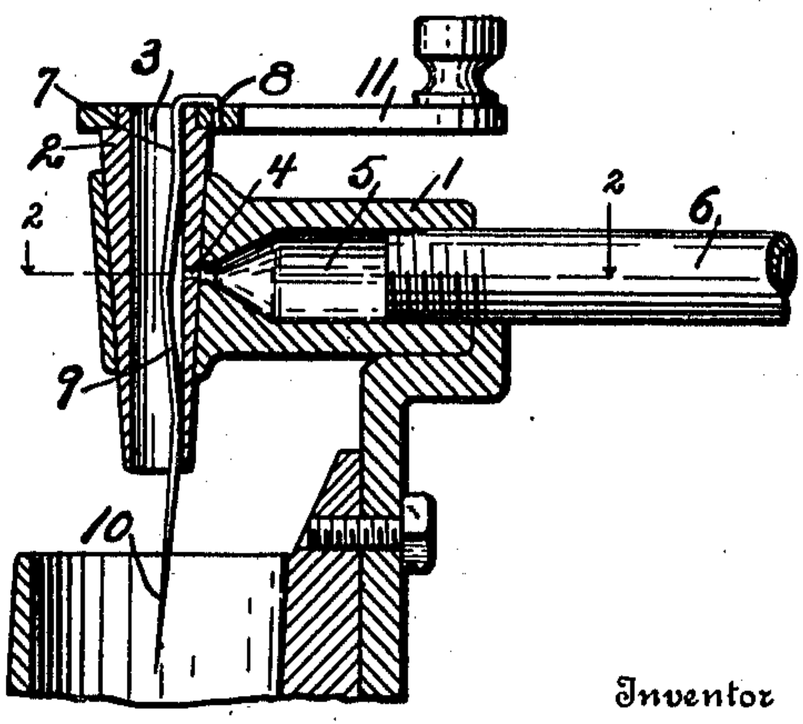

Fig. V.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE E. CLAPP, OF KALAMAZOO, MICHIGAN.

FAUCET.

993,758. Specification of Letters Patent. **Patented May 30, 1911.**

Application filed November 14, 1910. Serial No. 592,295.

To all whom it may concern:

Be it known that I, GEORGE E. CLAPP, a citizen of the United States, residing at the city of Kalamazoo, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Faucets, of which the following is a specification.

This invention relates to improvements in faucets.

The faucet is adapted particularly to feed fuel in a properly regulated amount to an oil burner or other heat generator.

In the feeding of oil to an oil burner, it is quite desirable to deliver the same in a regular amount, particularly in a fine stream, which is a matter of considerable difficulty, when it is considered that crude oil, which is very desirable for a fuel, is a thick viscid substance, which does not flow freely and will be delivered in large drops at comparatively wide intervals when a restricted flow with an ordinary faucet is attempted.

My improved faucet is particularly effective in handling such crude oil, but it is also desirable in handling kerosene or any lighter hydrocarbons than crude oil, which it also delivers in small, continuous, regulated amounts. The faucet delivers such viscid substances as crude oil in a very fine stream. Less viscid substances are delivered in substantially a fine stream, consisting of a series of small drops in rapid succession.

The object of this invention is to provide a faucet from which a steady flow can be readily and completely regulated.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure showing a preferred embodiment of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which,—

Figure 1 is a side elevation view of my improved faucet attached to a pipe. Figs. 2 and 3 are sectional plan views, taken on a line corresponding to line 2—2 of Fig. 1, showing the adjustment of the spigot in such faucet. Fig. 4 is a detail elevation view of the spigot and lead-wire removed from the faucet. Fig. 5 is a vertical sectional view, taken on a line corresponding to line 5—5 of Fig. 2, showing the relation of the parts.

In the drawing, the sectional views are taken looking in the direction of the little arrows at the ends of the section lines, and similar numerals of reference refer to similar parts through the several views. This faucet is that appearing in my concurrent application for patent Ser. No. 571,880, July 14, 1910.

Referring to the numerals of reference, the faucet 1 is provided with a tubular, tapered spigot 2, the same being hollow, as indicated at 3, and open from top to bottom. In the side of the spigot 3 is a port or aperture 4 to register with a broad aperture leading into the enlarged chamber 5 within the faucet 1. The faucet is connected to a comparatively large pipe 6, from which it receives the supply. Within the spigot is arranged a lead-wire 7, which is provided with a hooked end 8, which hooks into a suitable hole in the top end of the spigot and leads down past the front of the port 4. This lead-wire is slightly offset at 9, opposite said port, so that there is no obstruction to the flow of fuel, such as viscid crude oil, into the said spigot.

As soon as the oil oozes into the spigot, it will contact with the lead-wire 9, which will carry it downwardly. This lead-wire terminates in a tapered point 10 beneath the spigot. Owing to the taper of this wire, the volume of the viscid material thereon will be gradually contracted, owing to its capillarity, and it will be delivered off of the tip of the lead-wire in a very fine stream or series of small drops in a rapid succession. Because of the contact beneath the port the downward flow from the port will all be gathered by the wire and led off to the lead wire and away from the wall of the spigot. The spigot 2 is controlled by a suitable handle 11, which enables the user to very closely and accurately regulate the flow. This flow can be observed by glancing down inside the hollow spigot 3.

It will be seen that any liquid like viscid crude oil, will flow readily in the enlarged pipe 6, and will be delivered through the comparatively broad mouth of the pipe into the enlarged chamber 5 in the faucet, and will be passed in large stream up to and against the side of the spigot. As the spigot is tubular, the oil will have to pass only a very short distance through the contracted port 4, and this is completely adjustable by means of the handle 11, so that the flow of the oil can be accurately regulated. With

viscid oil, without the lead wire, it will descend through the hollow spigot 3 and drop off at the lower end in large drops. This makes the device impracticable for feeding a burner. These large drops are regulated and brought down into a fine stream by means of the lead-wire 7, located and arranged as indicated. I prefer to secure this effective location of the lead-wire by a bend in the wire and contacting the same with the interior of the tubular spigot below the port or aperture 4. This will be found a most practical way of doing the work, and I wish to claim that structure specifically, I also claim broadly the use of a tapered lead-wire for leading such material as viscid crude oil into a fine stream.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A faucet comprising an exterior casing having a chamber with an outlet port; a tubular tapered spigot open at the top and bottom disposed in said casing, with a lateral port to register with the said outlet port of said chamber and control the flow therefrom; a lead wire having a tapered point extending beneath the spigot, disposed within said spigot and offset opposite the said port and contacting with the inside of said spigot beneath said port; and a suitable handle for adjusting the said spigot, coacting for the purpose specified.

2. A faucet comprising an exterior casing with an outlet port; a tubular tapered spigot open at top and bottom disposed in said casing with a lateral port to register with the said outlet port to control the flow therefrom; and a lead wire having a tapered point extending beneath the spigot, disposed within said spigot and offset opposite the said port and contacting with the inside of said spigot beneath said port, coacting for the purpose specified.

3. A faucet comprising an exterior casing with an outlet port; a tubular tapered spigot disposed in said casing, with a lateral port to register with the said outlet port to control the flow therefrom; and a lead wire having a tapered point extending beneath the spigot, disposed within said spigot and offset opposite the said port and contacting with the inside of said spigot beneath said port, coacting for the purpose specified.

4. A faucet comprising an exterior casing with an outlet port; a tubular spigot open at top and bottom disposed in said casing, with a lateral port to register with the said outlet port to control the flow therefrom; and a lead wire having a tapered point extending beneath the spigot, disposed within said spigot and offset opposite the said port and contacting with the inside of said spigot beneath said port, coacting for the purpose specified.

5. A faucet comprising an exterior casing with an outlet port; a tubular spigot disposed in said casing, with a lateral port to register with the said outlet port to control the flow therefrom; and a lead wire extending beneath the spigot, disposed within said spigot and offset opposite the said port and contacting with the inside of said spigot beneath said port, coacting for the purpose specified.

6. A faucet comprising an exterior casing with an outlet port; a tubular spigot disposed in said casing, with a lateral port to register with the said outlet port to control the flow therefrom; and a lead wire extending beneath the spigot, disposed within said spigot, contacting with the inside of said spigot beneath said port, coacting for the purpose specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

GEORGE E. CLAPP. [L. S.]

Witnesses:
L. G. GREENFIELD,
M. L. GLASGOW.