(No Model.)

G. HEIDEL.

PAINT BURNER.

No. 459,288. Patented Sept. 8, 1891.

Fig. I.

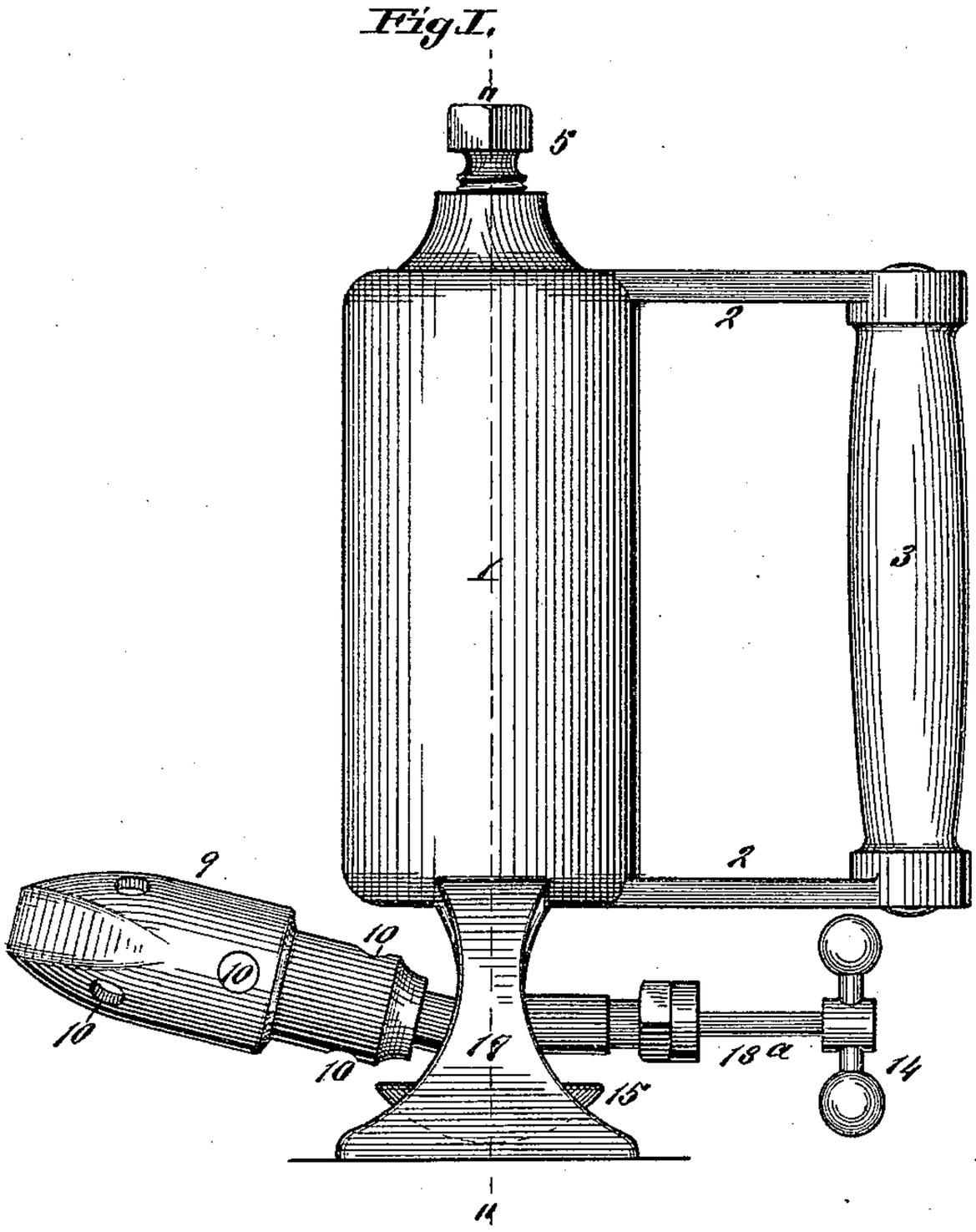


Fig. II.

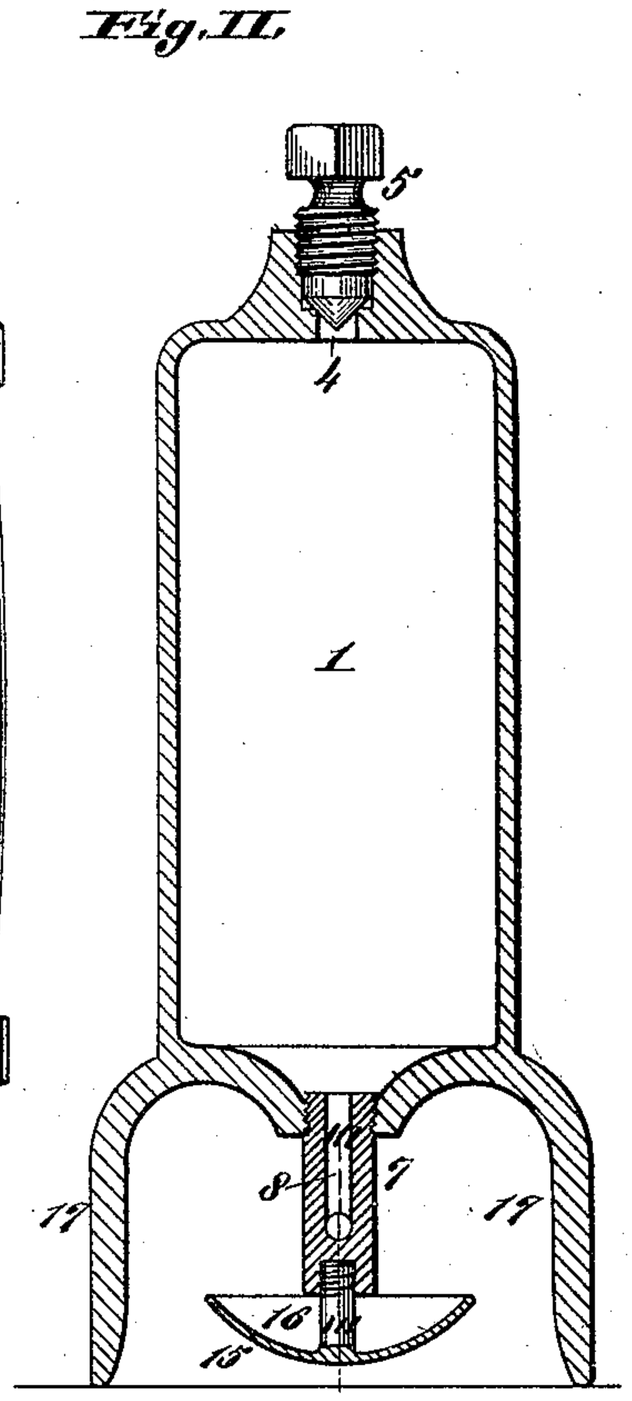
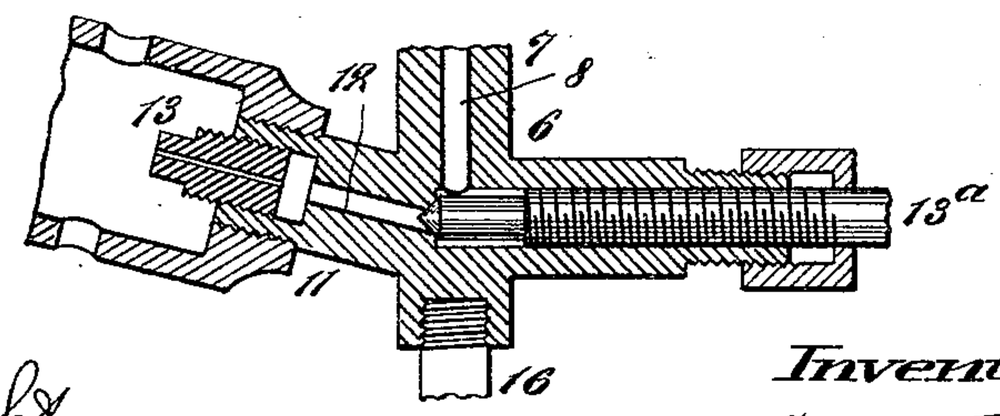


Fig. III.



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UNITED STATES PATENT OFFICE.

GUSTAVOS HEIDEL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO LOUIS KRIECKHAUS AND RICHARD MERKLE, BOTH OF SAME PLACE.

PAINT-BURNER.

SPECIFICATION forming part of Letters Patent No. 459,288, dated September 8, 1891.

Application filed February 12, 1891. Serial No. 381,210. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVOS HEIDEL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Paint-Burners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to produce a simple, cheap, and effective paint-burner and a paint-burner in which its own heat is utilized to force the feed of the vapor.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a side view of my improved burner. Fig. II is a vertical section taken on line II II, Fig. I. Fig. III is an enlarged detail vertical section taken on line III III, Fig. II.

Referring to the drawings, 1 represents a tank or reservoir from which arms 2 project for the purpose of supporting the handle 3 and securing it to the tank. In the tank there is an opening 4, in which fits a screw plug-valve 5, which may be taken out to permit the tank to be filled with oil.

6 represents a casting having a neck 7, which is tapped into the lower portion of the reservoir and which is hollow or has a port 8, through which the oil and vapor pass from the tank.

9 represents a hollow head forming a combustion-chamber, and in which are perforations 10 to admit air, which unites with the gases from the tank to produce combustion. The outer end of the head 9 is open to permit the escape of the commingled gas and air, at which point they are ignited, and the head is screwed onto a neck 11, forming part of the main casting 6. The neck 11 preferably projects in an upwardly direction, so as to cause the head 9 to assume an inclined position, as shown in Fig. I. Within the neck is a port 12, communicating with the combustion-chamber through a nipple 13, and which also communicates with the port 8, as shown in Fig. III.

13ª represents a valve which is adapted to seat against the inner end of the port 12 to regulate the passage of the oil and vapors from the reservoir to the combustion-chamber, and on the outer end of this valve is a head 14, by which it may be operated. The nipple 13 is screwed into the neck 11, so that by taking off the head 9 the nipple may be removed to be cleaned.

15 represents a cup secured to the casting 6 by means of a stem 16, and which is to be utilized for the purpose of containing oil for the initial heating of the casting 6 and tank 1. The tank 1 is provided with legs or projections 17, which straddle the casting 6 and which extend a short distance beneath the bottom of the cup 15, so that the burner may be supported on these legs when not in use. It will be seen that the cup 15 and the head 9 are close to the tank 1.

The operation is as follows: Oil is first placed in the cup 15 and ignited, which heats the casting 6 and tank 1 to generate the oil in the casting into a vapor and to produce a gas in the tank to force the feed of the burner. The valve 13ª is next opened and the commingled gas and air issuing from the head 9 is ignited. Owing to the close proximity of the head 9 to the tank 1, the latter is kept constantly heated and a gas produced therein which will cause the feed of the burner, avoiding the necessity of a device for forcing air into the tank to produce the feed.

I claim as my invention—

1. In a paint-burner, the combination of the tank 1, having the arms 2 and handle 3, a plug-valve fitted in the upper end of the tank, a casting 6, having a hollow vertical portion 7 and a hollow stem 11, a head 9, fitted on the stem 11, a valve 13ª, having a head 14, and legs 17, formed on the body and which project beneath the casting, substantially as and for the purpose set forth.

2. In a paint-burner, the combination of the tank 1, having the horizontal arms 2, a handle 3, secured to the arms 2, a plug-valve 5 in the upper end of the tank, a casting 6, secured to the bottom of the tank and having a hollow vertical portion 7 and a hollow inclined stem 11, a perforated head 9, secured to the stem 11, a nipple 13, a valve 13ª, a cup 15, and the legs 17, formed upon the body and extending beneath the casting, substantially as and for the purpose set forth.

GUSTAVOS HEIDEL.

In presence of—
E. S. KNIGHT,
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