

(No Model.)

G. HEIDEL.

SELF GENERATING BURNER FOR SAD IRONS.

No. 413,603.

Patented Oct. 22, 1889.

Fig. I.

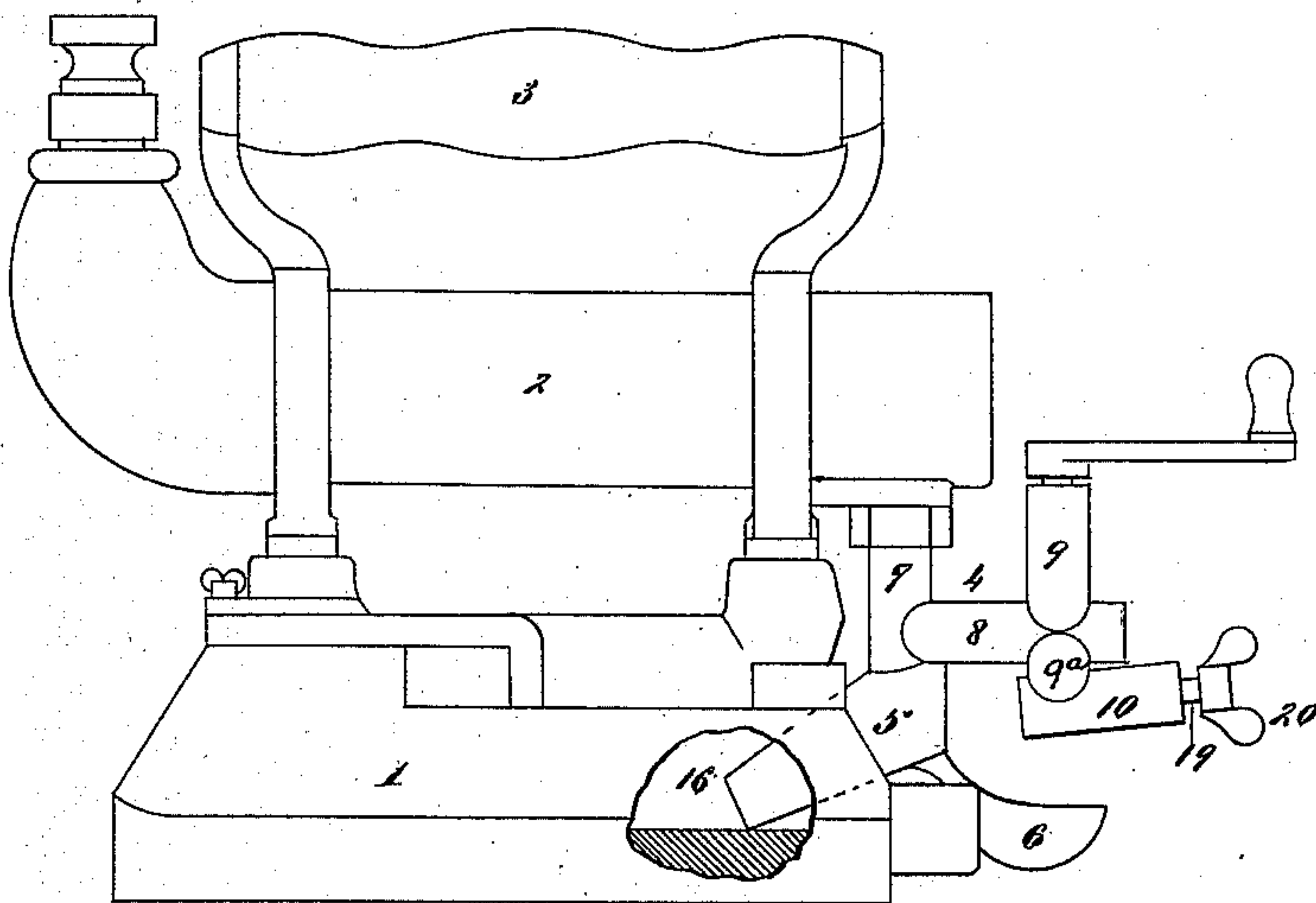


Fig. II.

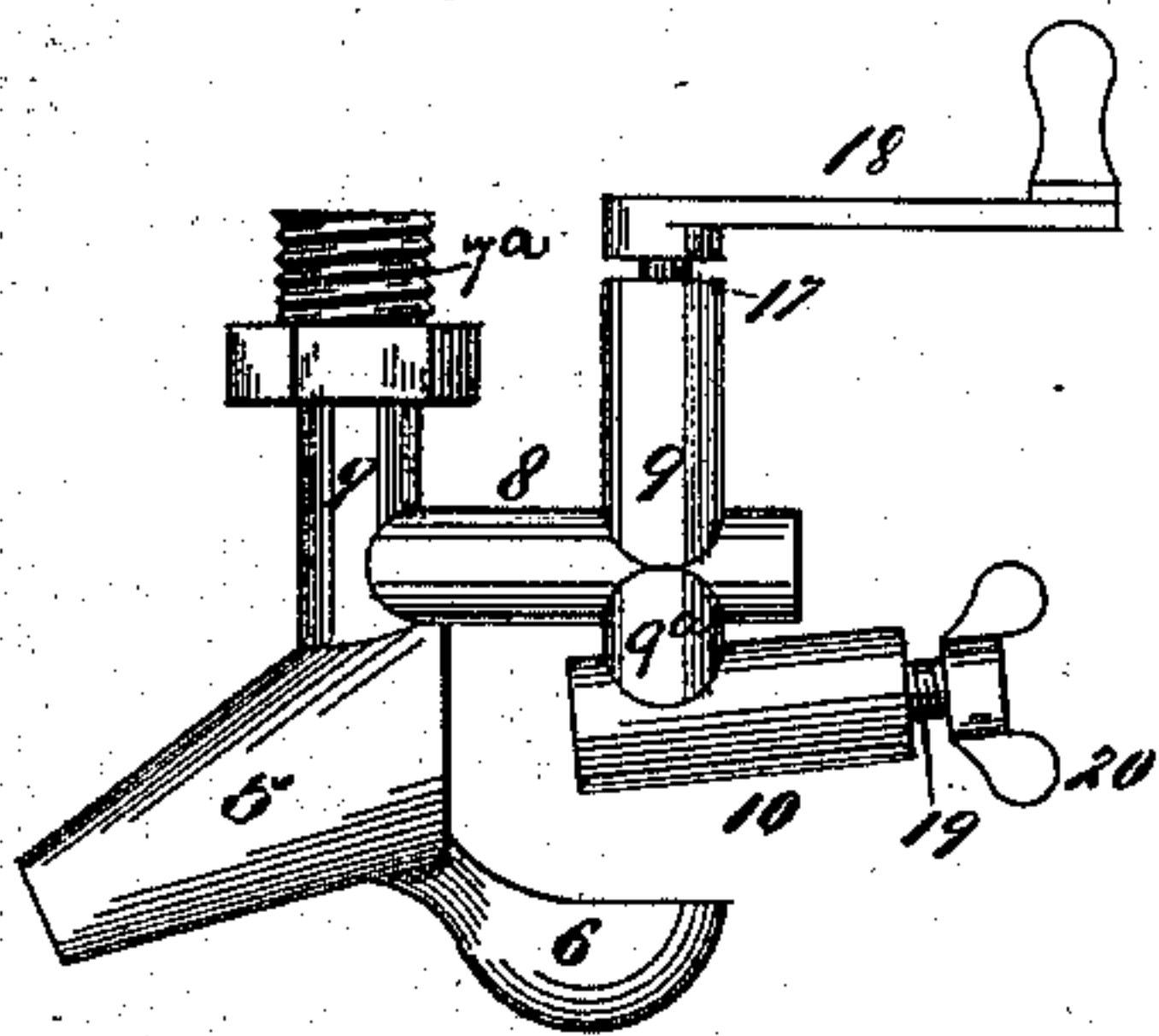


Fig. III.

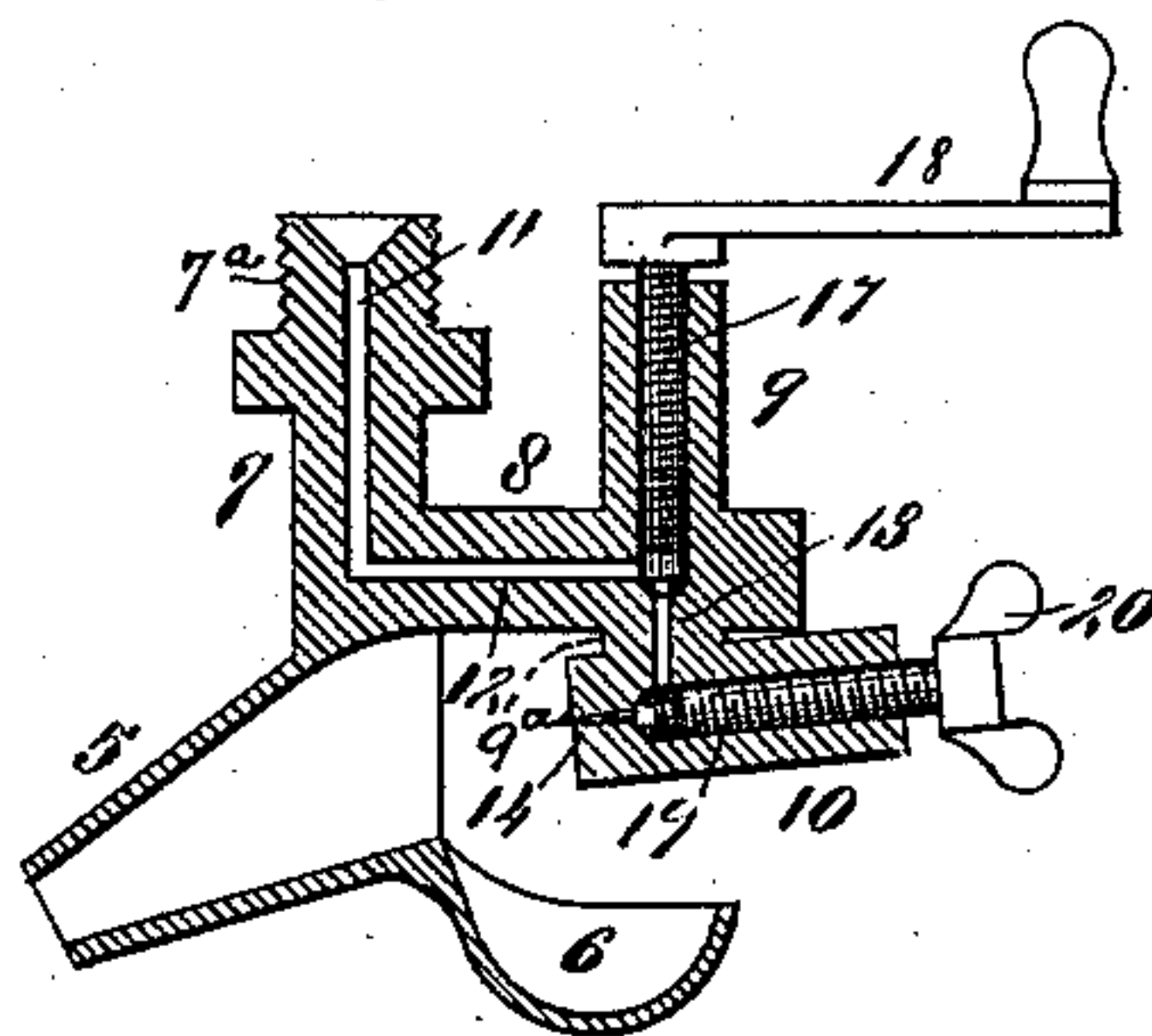
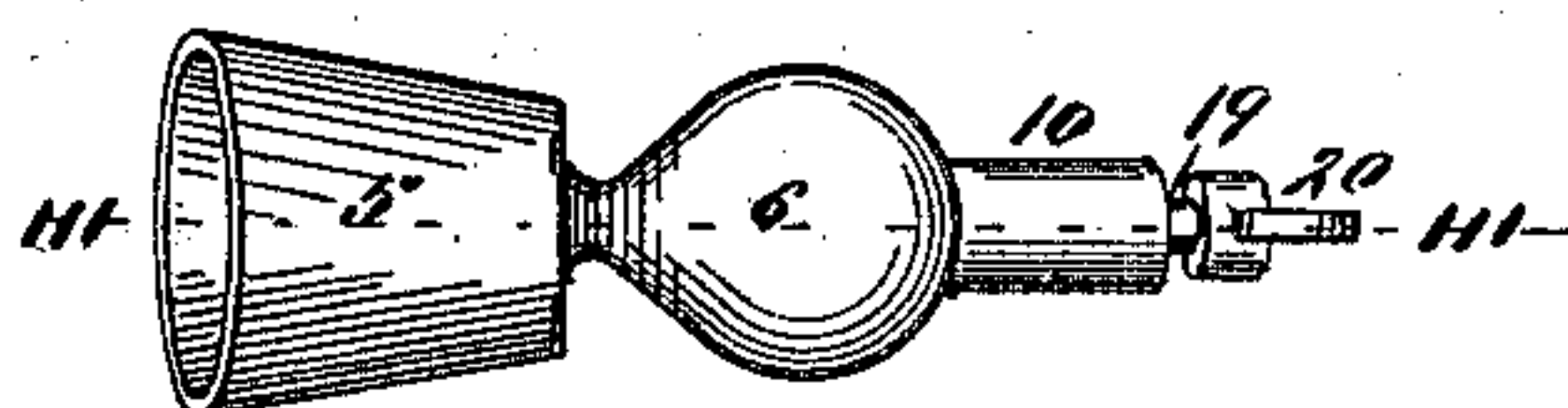


Fig. IV.



Attest:
E. Arthur,
George C. Bruce

Inventor:
Gus. Heidel
By Knights Bros
attys

UNITED STATES PATENT OFFICE.

GUSTAVOS HEIDEL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE NATIONAL SELF-HEATING SAD-IRON COMPANY, OF SAME PLACE.

SELF-GENERATING BURNER FOR SAD-IRONS.

SPECIFICATION forming part of Letters Patent No. 413,603, dated October 22, 1889.

Application filed October 3, 1888. Serial No. 287,060. (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 Self-Generating Burners for Sad-Irons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

10 Figure I is a side elevation of a self-heating sad-iron with my improved burner applied. Fig. II is a side elevation of the burner alone. Fig. III is a vertical section of the burner, taken on line III III, Fig. IV. 15 Fig. IV is a bottom view of the burner.

My invention relates to an improvement in self-generating burners for self-heating sad-irons; and my invention consists in features of novelty hereinafter fully described, and 20 pointed out in the claims.

Referring to the drawings, 1 represents the body of the iron, 2 the oil-reservoir, and 3 the handle.

4 represents the self-generating burner 25 to which my invention relates, and which consists of a downwardly and inwardly projecting commingling-tube 5, a drip-cup 6, extending outwardly from the tube, an arm 7, projecting upwardly from the outer end of 30 the tube, having a screw-threaded upper end 7^a, a body 8, extending outwardly from the juncture of the tube 5 and arm 7 in a horizontal direction, an upwardly-extending arm 9, and a downwardly-extending short neck 9^a 35 at the outer end of the body, and a pendent head 10, supported on the neck. In the part 7 is a port or passage 11, communicating with a port or passage 12 in the part 8, which in turn communicates with a port or passage 13 40 in the part 9^a, and this latter passage communicates with a jet-opening 14 in the part 10. The part 7^a screws into the supply-tank 2, and the fuel passes from the supply-tank through the ports or passages 11, 12, and 13, 45 issuing from the jet-orifice 14 into the commingling-chamber 5, which discharges the commingled gases and air into the combustion-chamber 16 in the body of the iron. The passage 13 is controlled by a screw-valve 17, 50 fitting in the part 9 of the burner, and which

is provided with an operating-lever 18. The jet-orifice 14 is regulated by a valve 19, fitting in the part 10 of the burner and provided with a turning-lever 20.

The commingling-chamber 5, cup 6, and 55 parts 7, 8, 9, 9^a, and 10 of the burner are preferably all cast in one piece, thus making a cheap and durable burner, and the commingling-chamber carries the gases and air into the combustion-chamber of the iron without 60 the use of other parts or connections.

This burner is adapted for various uses.

The sad-iron to which my burner is shown as applied is shown, described, and claimed 65 in my application filed March 17, 1888, Serial No. 267,538.

I claim as my invention—

1. The generating-burner consisting of the forwardly-projecting commingling-tube 5, the 70 supply-arm 7, extending upwardly therefrom, having a passage 11, the conducting-body 8, extending outwardly from the juncture of the tube and arm in a horizontal direction, having a passage 12, the main valve-arm 9, 75 extending upwardly from the body, the short neck 9^a, extending downwardly from the body, having a passage 13, and the jet-valve head 10, depending from the neck, having a jet-orifice 14, substantially as described.

2. The generating-burner consisting of the 80 forwardly-projecting commingling-tube 5, the supply-arm 7, extending upwardly therefrom, having a passage 11, the conducting-body 8, extending outwardly from the juncture of the tube and arm in a horizontal direction, 85 having a passage 12, the main valve-arm 9, extending upwardly from the body, having a screw-valve 17, provided with a lever 18, the short neck 9^a, extending downwardly from the body, having a passage 13, and the 90 jet-valve head 10, depending from the neck, having a jet-orifice 14, and provided with a valve 19, having a lever 20, substantially as described.

3. The generating-burner consisting of the 95 forwardly-projecting commingling-tube 5, having a drip-cup 6, extending outwardly therefrom, the supply-arm 7, extending upwardly from the tube, having a passage 11, the conducting-body 8, extending outwardly 100

from the juncture of the tube and arm in a horizontal direction, having a passage 12, the main valve-arm 9, extending upwardly from the body, having a screw-valve 17, provided with a lever 18, the short neck 9^a, extending downwardly from the body, having a passage 13, and the jet-valve head 10, depending from the neck, having a jet-orifice 14, and provided with a valve 19, having a lever 20, substantially as described.

GUSTAVOS HEIDEL.

In presence of—

GEO. H. KNIGHT,

EDW. S. KNIGHT.