

(No Model.)

J. K. PURINTON.
BOILER.

No. 379,245.

Patented Mar. 13, 1888.

Fig. 1

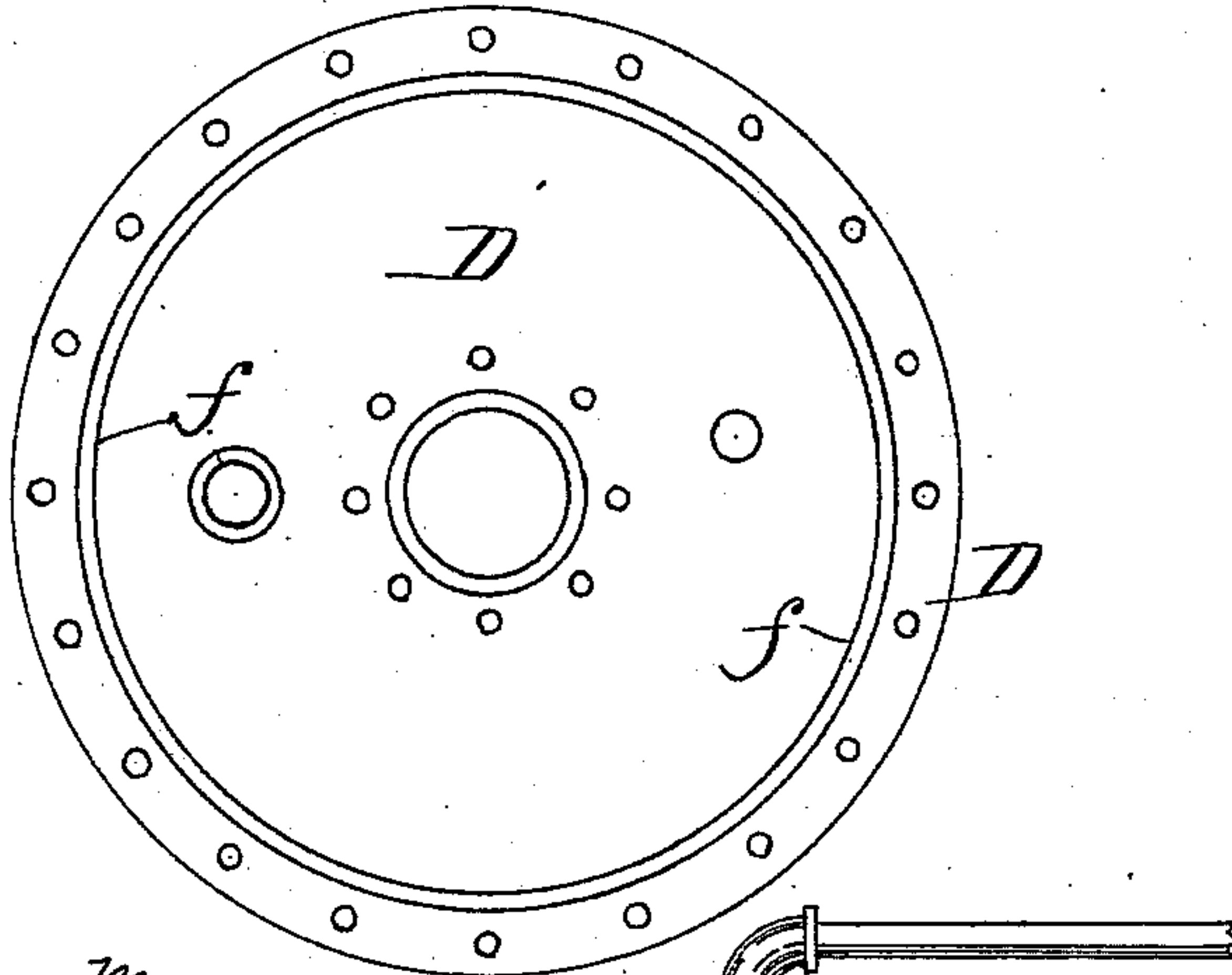
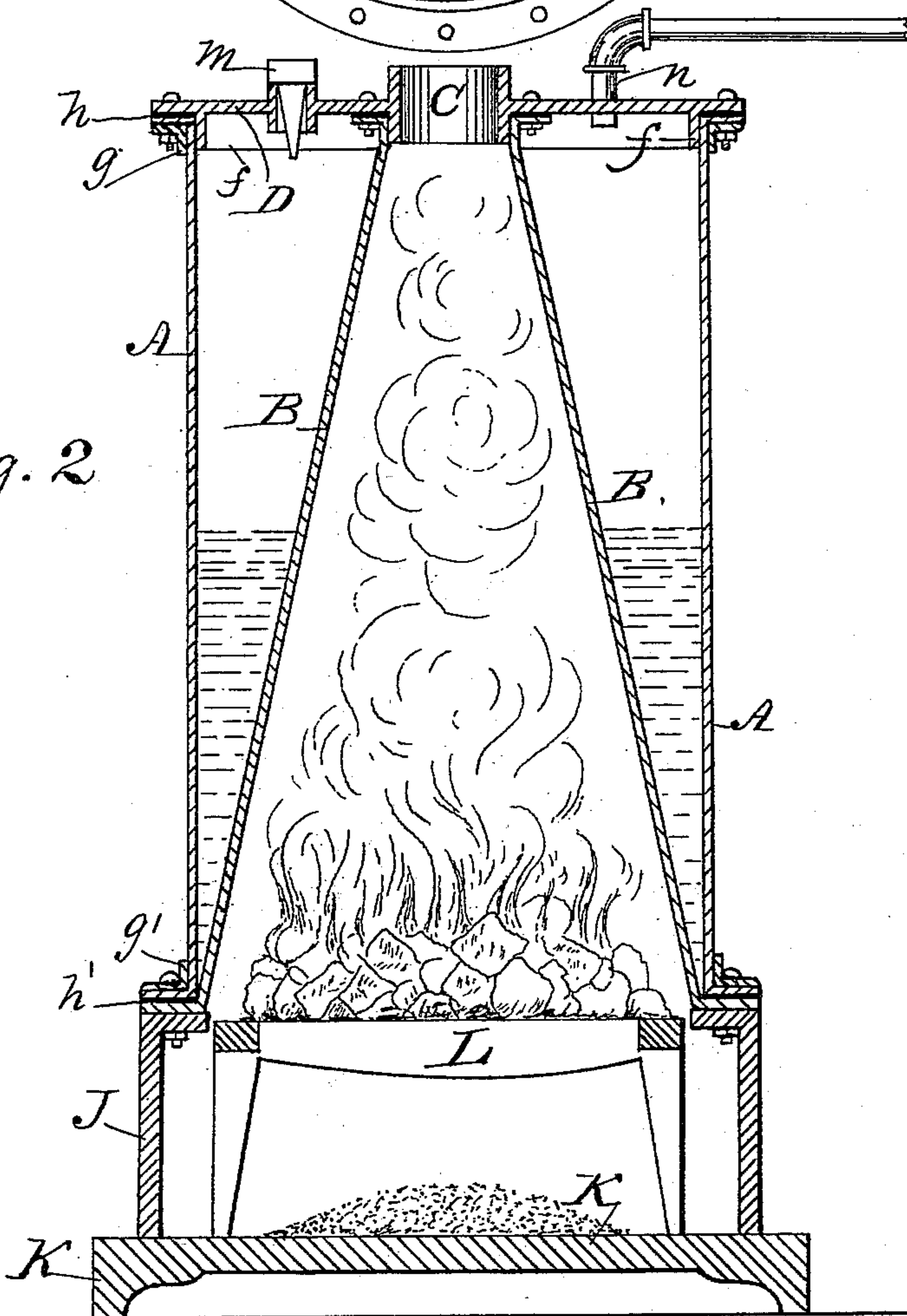


Fig. 2



Witnesses:
J. C. Tate,
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Inventor:
Judson K. Purinton,
By Thomas G. Orrig, Attorney.

UNITED STATES PATENT OFFICE.

JUDSON K. PURINTON, OF DALLAS CENTRE, IOWA.

BOILER.

SPECIFICATION forming part of Letters Patent No. 379,245, dated March 13, 1888.

Application filed May 17, 1887. Serial No. 238,554. (No model.)

To all whom it may concern:

Be it known that I, JUDSON K. PURINTON, a citizen of the United States of America, and a resident of Dallas Centre, in the county of Dallas and State of Iowa, have invented new and useful Improvements in Boilers, of which the following is a specification.

My invention relates to the steam generator and boiler for which United States Letters Patent No. 264,101 were issued to me September 12, 1882; and it consists in the combination of a cast-metal head and a cast-metal rim with the top of the sheet-metal boiler, and a cast-metal rim and cast-metal base and loose bottom with the lower end of the boiler and the grate, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a bottom view of the top plate, and Fig. 2 a vertical sectional view of the boiler, showing my improvements applied.

A represents the outer shell of an upright sheet-metal boiler, that may vary in size as desired.

B is an inner inclined shell fixed to the bottom of the boiler and the center of the head of the boiler, where it terminates in a smoke-flue, C.

D is the circular cast-metal head of the boiler. It has an annular flange, *f*, on its under side and a central opening that has flanges above and below, as clearly shown in Fig. 2.

g is a cast-metal rim that is elbow-shaped in its cross-section under the outwardly turned top edge of the sheet-metal boiler.

h is a packing-ring placed between the head D and the flange at the top of the boiler. A series of rivets or bolts, passed through perforations in the head, the packing, the boiler-flange, and the rim, clamp all the parts firmly together, as required to produce a steam-tight joint and neat finish around the top boiler.

J is the cast-metal base, open at its bottom, and provided with an opening at its top adapted to admit the grate. The bottom of the outer shell, A, and the bottom of the shell B have overlapping outwardly turned flanges, between which a packing-ring, *h'*, is placed, and a metal rim, *g'*, then placed on top, and all the parts then firmly fixed to the top of the base J by means of rivets or bolts, to firmly connect the boiler with the base, and at the same time produce a durable steam-tight joint around the bottom of the boiler and a neat finish.

K is a cast-metal loose bottom upon which the grate L is placed, and the boiler then placed over the grate to produce a boiler-furnace.

m represents an escape valve and port through which water can be inducted to the boiler.

n is an eduction-tube through which steam can be conveyed to a barrel or other suitable vessel to heat water, steam feed, or any other purpose desired.

I claim as my invention—

1. The head D, having a flange, *f*, near its circumference, and a flanged central opening, the rim *g*, and packing-ring *h*, in combination with the outer shell, A, and inclined shell B, in the manner set forth, for the purposes stated.

2. An improved agricultural boiler and steam-generator, consisting of outer shell, A, an inclined inner shell, B, a cast-metal head, D, having a flange, *f*, and a central flanged opening, an open-bottomed base, J, rims *g* and *g'*, a grate, L, and a loose bottom, K.

JUDSON K. PURINTON.

Witnesses:

E. B. CLARY,
J. M. HOOPES.