

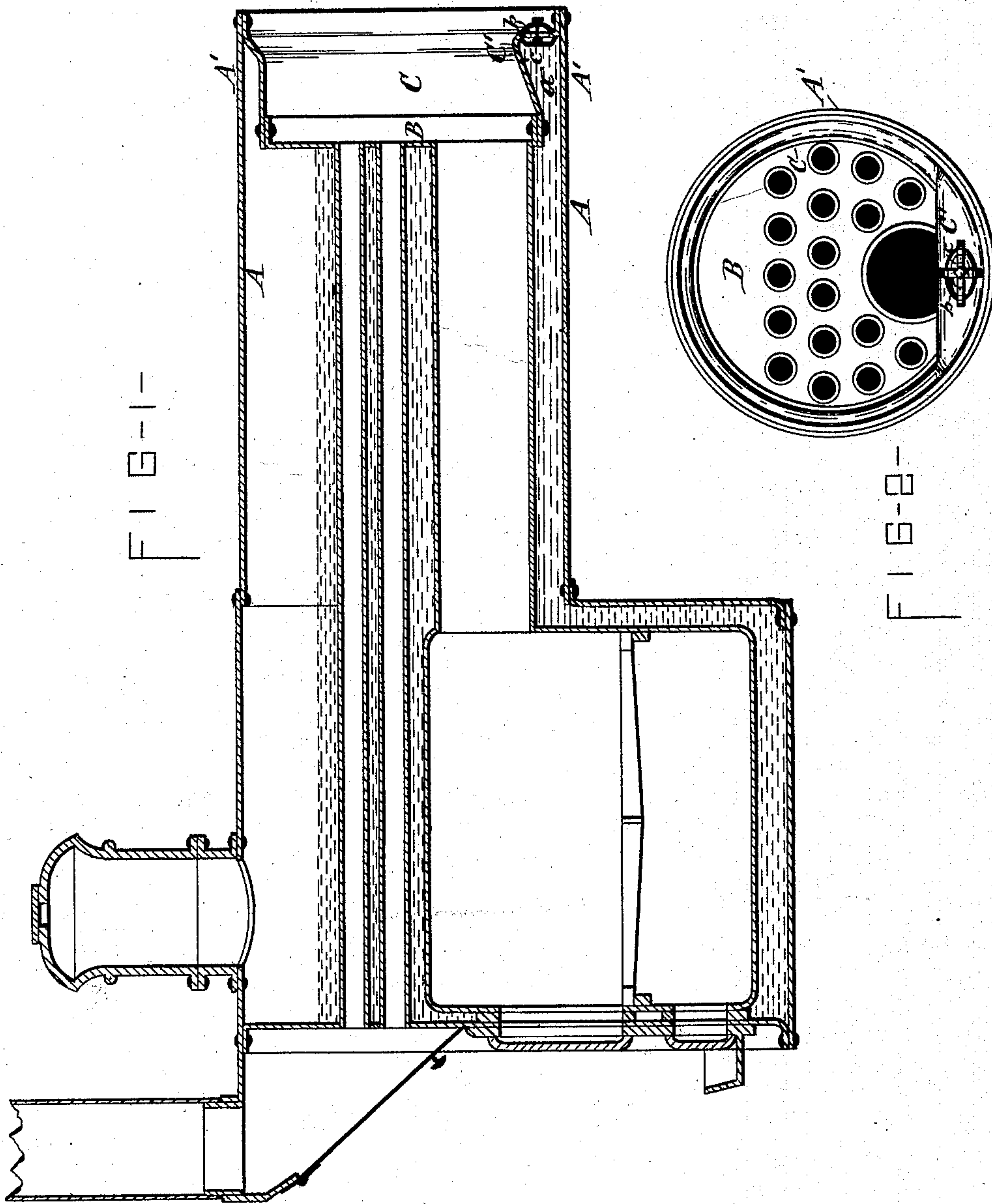
(No Model.)

G. A. PORTER.

STEAM BOILER.

No. 325,967.

Patented Sept. 8, 1885.



ATTEST—

Wm. G. Raymond

C. Bendixen

INVENTOR—

George A. Porter

per D. L. L. & Co.

his Atty.

UNITED STATES PATENT OFFICE.

GEORGE A. PORTER, OF SYRACUSE, NEW YORK.

STEAM-BOILER.

SPECIFICATION forming part of Letters Patent No. 325,967, dated September 8, 1885.

Application filed June 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. PORTER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and
5 useful Improvements in Steam-Boilers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention has reference to the class of
10 steam-boilers having a water-space surrounding the smoke-box at the end of the boiler, said water-space being necessarily very narrow owing to the lower flues requiring the flue-sheet to reach within a short distance
15 from the boiler-shell to receive the ends of said flues, and said contraction of the water-space renders it exceedingly difficult to obtain access thereto for cleaning it.

The purpose of this invention is to overcome said difficulty of cleaning the water-space around the smoke-box; and to that end the invention consists in the novel construction of parts as hereinafter fully described, and specifically set forth in the claims.

25 In the annexed drawings, Figure 1 is a longitudinal section of a steam-boiler embodying my invention, and Fig. 2 is an end view of the same.

Similar letters of reference indicate corresponding parts.

30 A denotes the boiler-shell; B, the flue-sheet, and C the smoke-box, which latter is formed of the boiler-shell extension A', beyond the flue-sheet B, and the smoke-box shell secured
35 at one end to the flue-sheet and at the opposite end to the end of the boiler-shell extension

and formed with the water-space *a* around it. The bottom portion of the smoke-box shell C, I form with an upward deflection, C', at the end of the boiler-shell extension A', so
40 as to deepen the water-space *a* at the outer end. This upwardly deflected portion of the smoke-box shell I provide with a hand-hole, *b*, and a cover, *c*, which is removably secured across
45 said hand-hole in the usual and well-known manner. This hand-hole affords ready access to the bottom portion of the water-space *a* for cleaning the same and the bottom of the interior of the boiler when required.

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

1. In a steam-boiler, a water-space around the smoke-box, and deepened at its outer end, and a hand-hole in said end of the water-jacket for the purpose of cleaning the same,
55 as set forth.

2. The combination, with the boiler-shell extension forward from the flue-sheet, of the smoke-box shell extending the length of the
60 boiler-shell extension and formed with an upward deflection at the end of the boiler-shell extension, and a hand-hole in the said deflected portion of the smoke-box shell, substantially as described and shown.

65 In testimony that I claim the foregoing I have hereunto set my hand this 10th day of June, A. D. 1885.

GEORGE A. PORTER.

Witnesses:

FREDERICK H. GIBBS,
C. BENDIXON.