(No Model.)

H. R. JUNE.

MUD PAN.

No. 510,794. Patented Dec. 12, 1893.

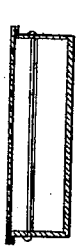

Fig. 4.

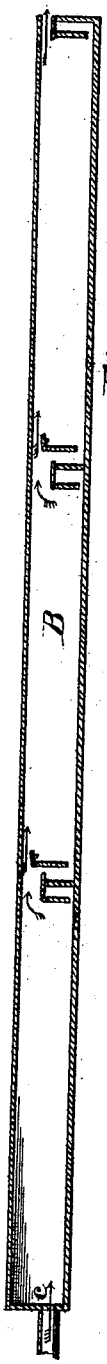

Fig. 2.

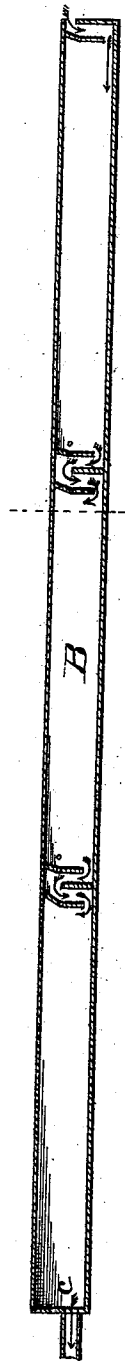

Fig. 3.

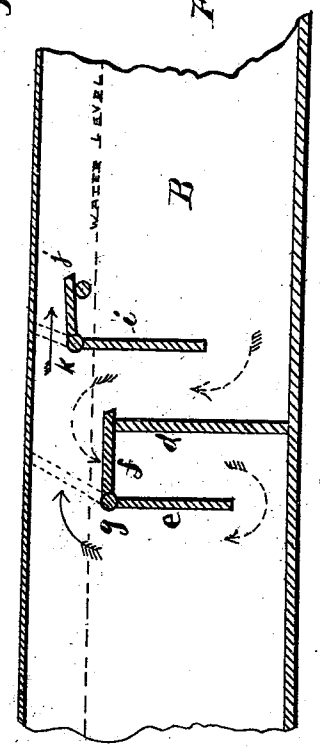

Fig. 5.

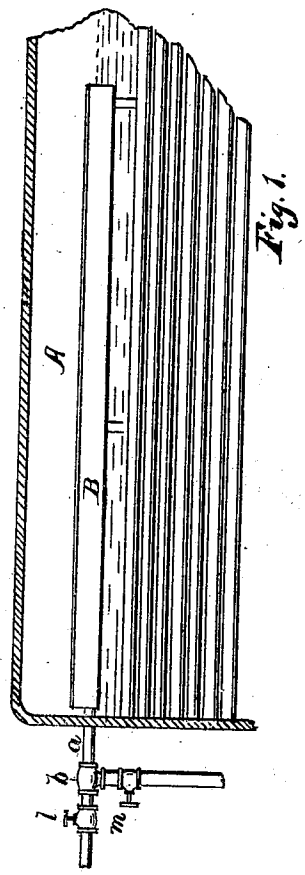

Fig. 1.

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HENRY R. JUNE, OF ELMIRA, NEW YORK.

MUD-PAN.

SPECIFICATION forming part of Letters Patent No. 510,794, dated December 12, 1893.

Application filed June 21, 1893. Serial No. 478,384. (No model.)

To all whom it may concern:

Be it known that I, HENRY R. JUNE, of Elmira, in the county of Chemung, in the State of New York, have invented new and useful Improvements in Mud-Pans, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to mud-pans for boilers.

My object is to produce a pan to catch the mud or other foreign substances contained in the water which is introduced into a boiler, providing easy and quick means for removing such refuse; cheap and durable in its construction and of great utility, and to that end my invention consists in the several new and novel features and combination of parts hereinafter described and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, shows a side view of the interior of a boiler, provided with my mud-pan. Fig. 2, shows a longitudinal vertical section of the mud-pan and the valves, as it appears when the water is introduced into it and into the boiler. Fig. 3, is a similar view of the pan showing the position of the valves, when in the act of removing the débris. Fig. 4, is an end view thereof. Fig. 5, is an enlarged detail of a vertical section of the pan.

A—, is a boiler of any ordinary construction provided with a pipe —*a*— for introducing the water into the boiler and also for blowing the mud and other foreign substances out of the pan, it being provided with a three-way valve —*b*—, to which are respectively connected the inlet and outlet pipes.

B—, is the mud-pan constructed preferably rectangular, as shown in Fig. 4, the inlet pipe —*a*— connected with it at its lower front end, as shown at —*c*—.

d—, is a partition extending transversely across the pan and rising to half or two-thirds of its depth, as shown.

e—, is a similar partition located substantially centrally across the pan, allowing the water to pass under it and over it as shown.

f—, is a valve hinged at —*g*— adapted to assume the position shown in dotted lines in Fig. 5.

i—, is a partition substantially similar to the partition —*e*— above described and provided with a valve —*j*— journaled at —*k*— adapted to be raised to assume the position shown in dotted lines in said Fig. 5.

When the water is introduced into the boiler, it passes into the pan, as indicated by the arrow in Fig. 2 and when it strikes the partition —*e*— it passes over it through all of the valves down to the position as shown in Fig. 2, the mud or foreign substance depositing itself in the bottom of the pan and the boiler being filled by the overflow, in case the pan is located near the high-water level as shown.

I do not, however, limit myself to this construction as it will be evident that the pan may be located at the bottom of the boiler, with equal facility and perform the same functions for the purposes.

When it is desired to remove the mud or dirt from the bottom of the pan, the inlet pipe is shut off by the cock —*l*— and the cock —*m*— is opened, and the steam then takes the direction shown in Fig. 3, throwing the valves —*f*— and —*j*— up to the position shown in dotted lines, thus forcing the refuse along the bottom and up between the partitions and down to the bottom and out through the pipe —*a*—, as shown in said Fig. 3.

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

1. The herein described mud-pan provided with a pipe —*a*— at one end, partitions —*d*—, and —*e*—, and valve —*f*—, as set forth.

2. The herein described mud-pan provided with a pipe —*a*—, and having partitions —*d*— and —*e*—, a valve —*f*—, partition —*i*—, a valve —*j*—, all adapted to operate substantially as described for the purposes set forth.

3. The combination with a boiler having the pipe —*a*— provided with a three-way cock —*b*—, a mud-pan having the pipe —*a*— leading thereto, the partitions —*d*— and —*e*—, the valve —*f*—, the partition —*i*— and the valve —*j*— all adapted to operate substantially as described for the purposes set forth.

In witness whereof I have hereunto set my hand this 9th day of June, 1893.

HENRY R. JUNE.

In presence of—
FRED. L. NORRIS,
A. S. HAMILTON.