

C. C. CHAMBERLIN.
ADJUSTABLE SUPPORT FOR FLUE CLEANERS.
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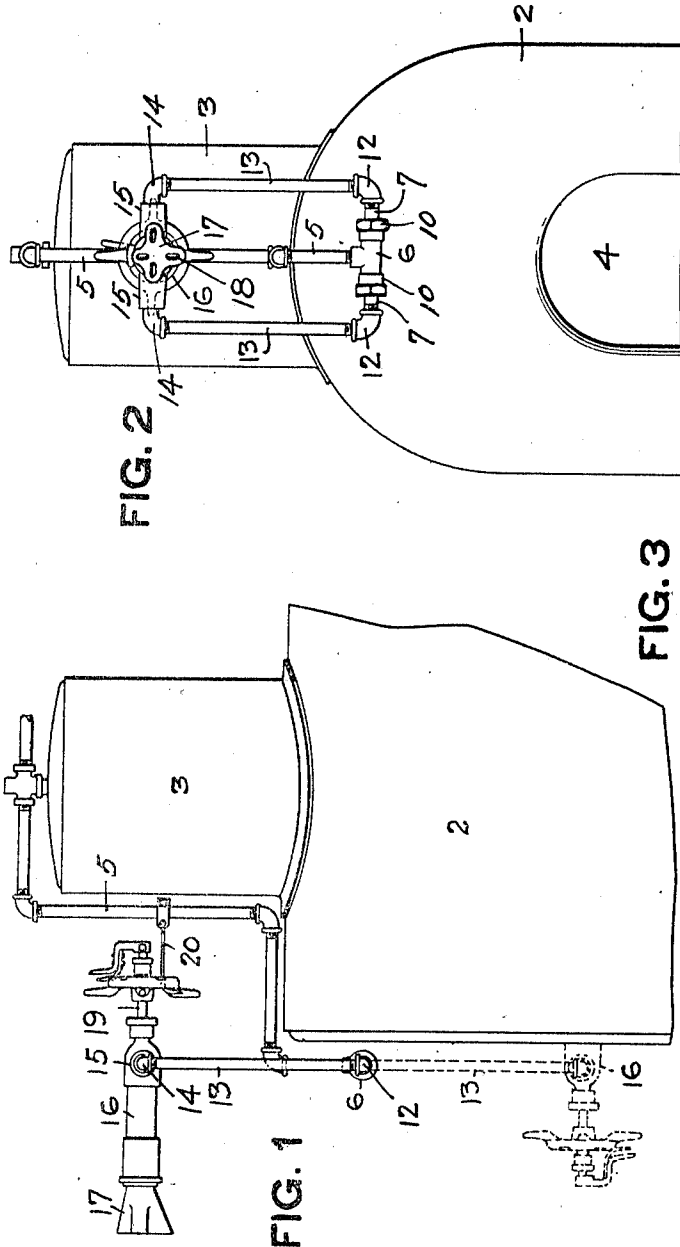
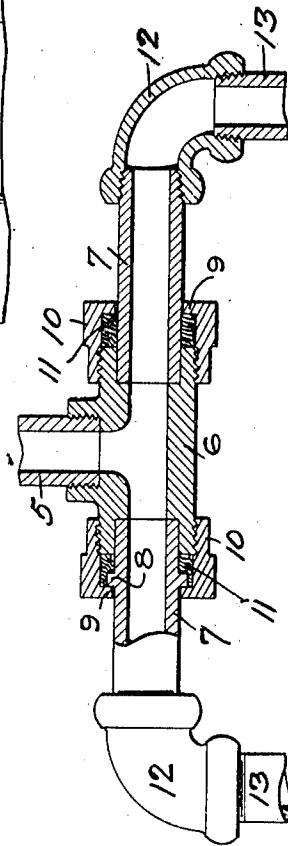


FIG. 3



WITNESSES.
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ADJUSTABLE SUPPORT FOR FLUE-CLEANERS.

1,012,327.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES C. CHAMBERLIN, a citizen of the United States, and resident of Washington, in the county of Washington and State of Pennsylvania, have invented a new and useful Improvement in Adjustable Supports for Flue-Cleaners; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an adjustable support for a boiler-flue cleaner.

The object of my invention is to provide a simple and efficient form of support for a boiler-flue cleaner which is particularly adaptable to boilers for field-work, such as the drilling of oil and gas-wells, or in connection with the boilers of traction-engines for driving threshing machines, etc.

My invention contemplates the provision of means for adjustably and removably carrying a rotary flue cleaner of the modern type connected to the boiler, so that such a flue cleaner can be swung to and from operative position, being out of the way when not in use.

My construction is to be distinguished from prior devices in which swivel or elbow joints are employed in the steam pipe connected to a nozzle or flue cleaner adapted to clean only one flue or tube at a time, the said joints being essentially part of the flue cleaner and necessary to its operation in cleaning an entire set of flues. By my invention a complete operative flue cleaner is mounted in removable position externally of the boiler.

To these ends my preferred construction comprises, generally stated, in combination with a boiler and a steam supply pipe leading therefrom, a swinging support including a pipe section pivotally mounted externally of the boiler and connected to said steam supply pipe, and a boiler flue cleaner carried thereby preferably in rigid position relative to said swinging support and steam connected thereto, so that the steam from the boiler passes through the swinging support to the flue cleaner.

In the accompanying drawings, Figure 1 is a view of the portion of the front end of a boiler of the field-type to which my invention is applied; Fig. 2 is a front view; Fig. 3 is an enlarged detail of the swivel connection

between the support and the steam-pipe.

In the drawings the numeral 2 designates a portion of a suitable type of field-boiler with the steam-dome 3 and the front opening 4. A pipe 5 is connected to the steam-dome and said pipe extends down in front of the boiler where it is connected up to the T-connection 6. A swivel member 7 is inserted in the T-coupling 6, at each side, and said swivel members are provided with the collars 8 which are adapted to be engaged by the inwardly extending flanges 9 of the couplings 10 which are threaded onto the T-coupling 6. Suitable packing 11 is contained within the coupling 10 which forms a steam-tight joint and permits of the turning of the swivel members 7. The outer ends of the swivel members 7 are connected by the elbows 12 to the pipes 13. The outer ends of the pipes 13 have the elbows 14 which engage the inlets 15 of a suitable flue-cleaner 16.

The flue-cleaner I have illustrated is what is known as the Barnhill flue-cleaner illustrated and described in United States Letters Patent No. 913,675, and I have not deemed it necessary to illustrate the same in detail, as any suitable form of flue-cleaner may be employed. Generally speaking, however, said flue-cleaner has the nozzle with the outlets 18 which are adapted to be connected up successively with a valve contained within the flue-blower, so that by turning the rod 19 the valve may be connected up to any one of the outlets 18.

In order to support the flue-cleaner in raised position when not in use, I employ the hook 20 which may be connected to the pipe 5 as clearly illustrated in Fig. 1.

When my invention is in use and the flue-cleaner is not in operation, it is swung up into the position indicated in Fig. 1 with the hook 20 engaging the flue-cleaner, to hold it in its elevated position where it is out of the way, so that access may be had to the boiler for firing or other purposes. When it is desired to clean the flues the hook 20 is released and the adjustable support with the flue-cleaner may be swung down into the position indicated in dotted lines Fig. 1 with the forward end of the flue-cleaner entering the opening 4 so as to reach the tubes of the boiler. When the

flue-cleaner has been lowered to this position the same is admitted to the pipe 5 and the steam passes through said pipe and the support into the flue-cleaner whence it is discharged by the nozzle 17 into the flue of the boiler to thoroughly clean the same. When the flue cleaning operation is completed the support is swung quickly up out of the way and again engaged by the hook 20. In this way I provide a support for a boiler-flue cleaner specially adapted for field use in which the flue-cleaner when not in use is swung up out of the way so as not to interfere with the operations around the boiler. When, however, the flue-cleaner is to be used, it is readily brought into position without having to rig up a support for the flue-cleaner or make any pipe connections. The swinging joint between the support and the supply pipe is a practically steam tight construction so that there is no loss of steam and the flue-cleaner is provided with the necessary amount of steam to make its work effective.

It is apparent that the swinging support may be swung from the side of the boiler instead of from the top without departing from the spirit of my invention.

What I claim is:

1. The combination with a boiler and a steam supply pipe connected thereto, of a swinging support pivotally mounted externally of the boiler, and comprising a pair of pipe sections connected to said steam supply pipe, and a boiler flue cleaner rigidly carried by said pipe sections and steam connected thereto.
2. The combination with a boiler and a steam supply pipe leading therefrom, of a swinging support including a pipe section, provided with a swivel steam joint connecting the same to said supply pipe and pivotally carrying the same thereon externally of said boiler, and a boiler flue cleaner rigidly carried by said swinging support and steam connected thereto.
3. The combination with a boiler and a steam supply pipe leading therefrom, of a swinging support comprising a pair of pipe sections each provided with a pivoted steam joint connection with said supply pipe, and each having inwardly extending elbows and a boiler flue cleaner carried by said elbows and steam connected thereto.
4. The combination with a boiler and a

steam supply pipe, of a swinging support mounted externally of said boiler and comprising a pair of pipe sections each having a rotatable steam joint connection with said supply pipe, and each provided with rigid elbows, and a boiler flue cleaner carried between said elbows and steam connected thereto.

5. The combination with a boiler and a steam supply pipe leading therefrom, of swivel members supported on said steam supply pipe and each provided with a pipe section extending at substantially right angles thereto, and connecting with said steam supply pipe through said swivel members, and a boiler flue cleaner carried by said pipe sections, substantially as described.

6. The combination with a boiler and a steam supply pipe leading therefrom, of swivel members supported on said steam supply pipe and each provided with a pipe section extending at substantially right angles thereto, and connecting with said steam supply pipe through said swivel members, inlet pipes extending inwardly from said pipe sections, and a boiler flue cleaner carried between said inlet pipes, substantially as described.

7. The combination with a boiler and a steam supply pipe leading therefrom, of a swinging support including a pipe section, provided with a swivel steam joint connecting the same to said supply pipe and pivotally carrying the same thereon externally of said boiler, a boiler flue cleaner rigidly carried by said swinging support and steam connected thereto, and means for holding said flue cleaner in raised position when not in use.

8. The combination with a boiler and a steam supply pipe connected thereto, of a swinging support comprising pipe sections connected by swivel joints to said steam pipe, and supported thereon externally of said boiler, a flue cleaner carried by said pipe sections and steam connected thereto, and means for holding said swinging support in removed position, substantially as described.

In testimony whereof, I the said CHARLES C. CHAMBERLIN have hereunto set my hand.

CHARLES C. CHAMBERLIN.

Witnesses:

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