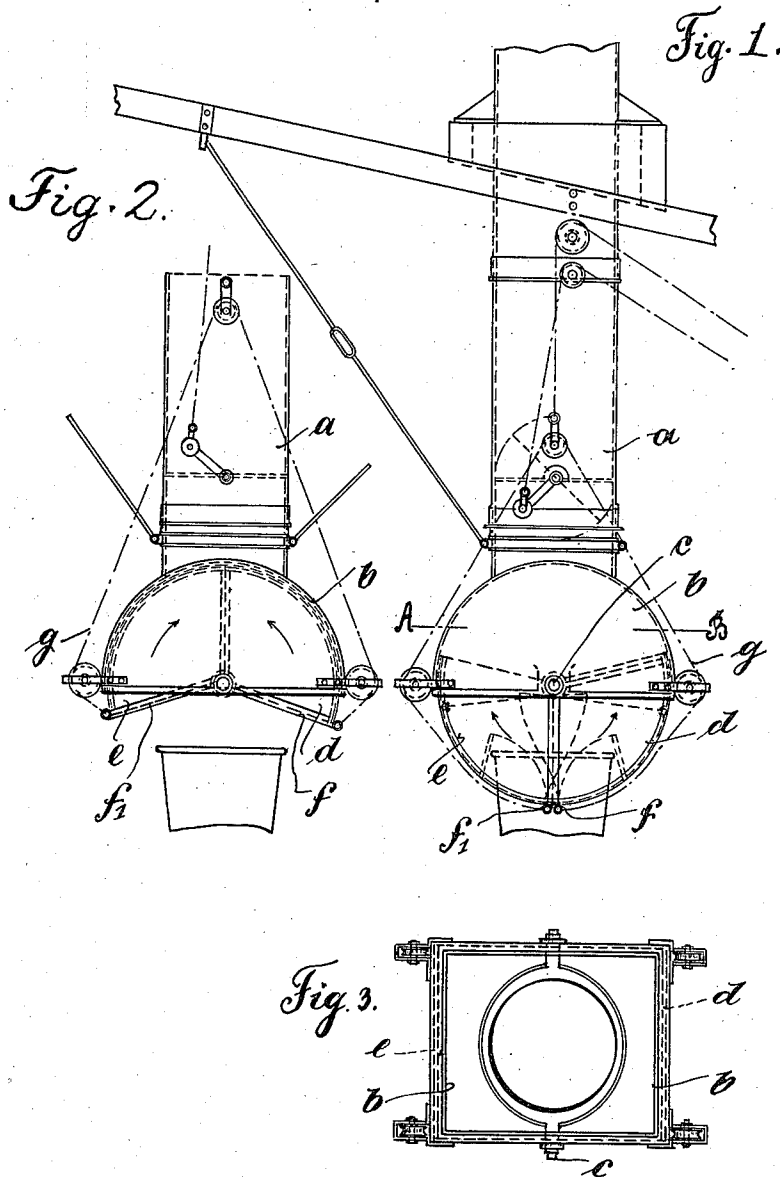


H. CLASEN.
SMOKE AND GAS COLLECTOR FOR ENGINE HOUSES.
APPLICATION FILED OCT. 3, 1911.

1,028,437.

Patented June 4, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

HERMANN CLASEN, OF SCHMIEDEFELD, GERMANY.

SMOKE AND GAS COLLECTOR FOR ENGINE-HOUSES.

1,028,437.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed October 3, 1911. Serial No. 652,653.

To all whom it may concern:

Be it known that I, HERMANN CLASEN, a subject of the German Emperor, and resident of Schmiedefeld, Germany, have invented certain new and useful Improvements in Smoke and Gas Collectors for Engine-Houses, of which the following is a specification.

Hitherto, smoke and gas collectors for engine-houses have become known, in which two semicylindrical flaps, which are movably suspended by hinges from the lead-off pipe and which inclose the flue-pipe of the locomotive, are by pulling contrivances connected with a throttle-flap within said lead-off pipe, so that the latter is closed by said throttle-flap, when the two movable flaps are raised from the flue-pipe, while the throttle-flap is again opened when said flaps are again placed upon the flue-pipe. From said known smoke catchers the subject matter of the present invention is distinct in that the lower part of the lead-off pipe is shaped like a hemispherical bonnet, in which a pair of flaps, which correspond to the envelop of the bonnet, are located so as to swing on a common axle in opposite direction, said flaps being adapted to be turned downward and outward and again to be moved back into the bonnet, thus liberating in the first instance the area of the lead-off pipe in order to embrace the flue-pipe and to make same tight toward the engine-house, while in the second instance they liberate the flue-pipe in order to close the lead-off pipe. Hereby, the arrangement of a separate throttle-flap for closing the lead-off pipe as well as its connection with the two other flaps, such as required in the old arrangements, is avoided, and thus the same result as by the latter is obtained but with simpler means.

The accompanying drawing shows the improved arrangement.

Figure 1 shows the same in a side view, in the position when the engine or locomotive is run beneath the lead-off pipe. Fig.

2 is a side view of same, in the position before the locomotive is run underneath. Fig. 3 is a cross section on the line A—B of Fig. 1.

a is the lead-off pipe which at its lower part is shaped like a hemispherical bonnet *b*. *d* and *e* are the two closing flaps for the lead-off pipe, which fit the inner envelop of the bonnet and swing in opposite direction on an axle *c*. In order to effect this, the axle *c* consists of a core, which carries one flap, and of a hollow tube placed above said core, which carries the other flap, each flap being adapted to be turned by a lever *f* and *f*¹ respectively attached to said core and tube. Upon the two flaps being swung downward, which is effected by a pulling contrivance *g* connected with the levers *f*, *f*¹, they embrace the flue-pipe and tighten same toward the engine-house. Upon the flap being turned back into the bonnet, they liberate the flue-pipe and close the lead-off pipe.

I claim:

A smoke and gas collector for engine-houses, comprising in combination a lead-off pipe beneath which the flue-pipe of the engine or locomotive is to be placed, a hemispherical bonnet at the lower end of said lead-off pipe, a pair of flaps corresponding to the envelop of said bonnet movably arranged within the latter and adapted to be turned in opposite direction and designed when turned downward and outward to embrace the flue-pipe of the locomotive placed underneath and to liberate the area of the lead-off pipe, but when again moved back to liberate the flue-pipe and to close the lead-off pipe, for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HERMANN CLASEN.

Witnesses:

HERMANN CLESS,
ERNST KATZ.