Dec. 18, 1928. 1,695,308

F. E. WILT

GAS VENT FOR GAS STOVES

Filed March 17, 1927

Fig. 2.

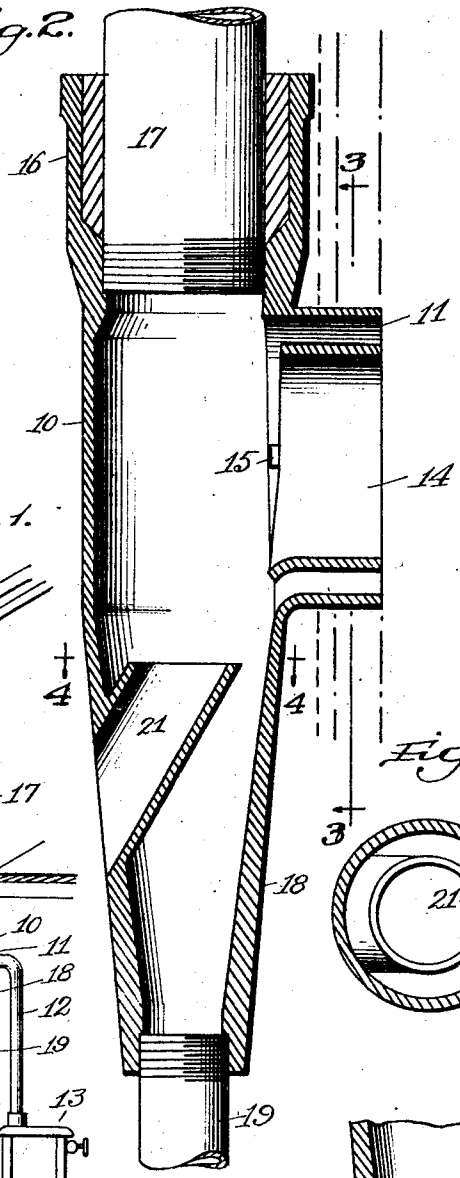


Fig. 3.

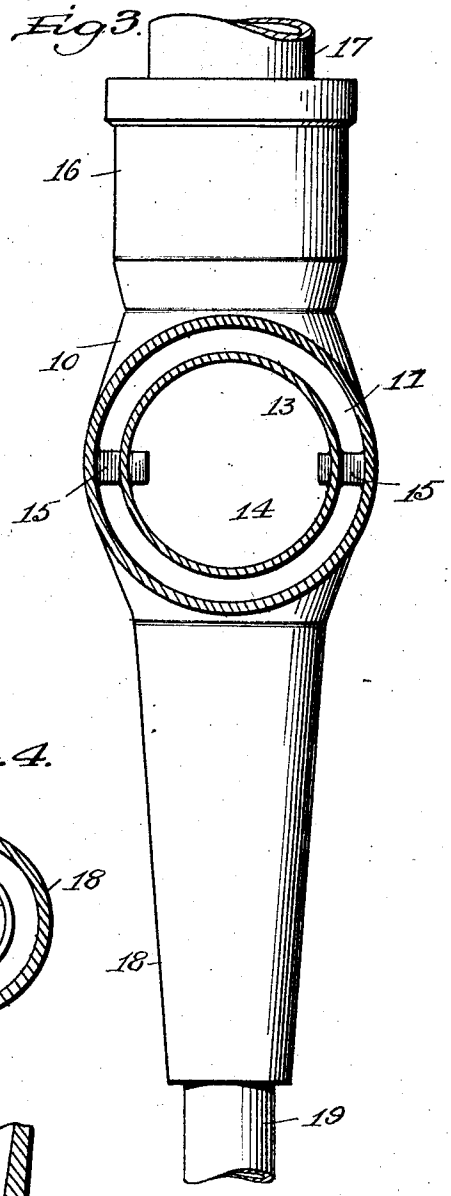
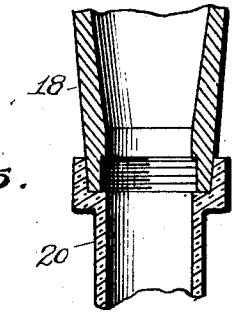


Fig. 1.

Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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GAS VENT FOR GAS STOVES.

Application filed March 17, 1927. Serial No. 176,132.

The object of this invention is to provide a simple appliance for insuring the proper disposition of obnoxious gas from a gas-stove, as more fully hereinafter set forth.

In the drawing—

Fig. 1 is a diagram of the wall of a building showing my appliance built therein;

Figs. 2, 3 and 4 are detail views of the appliance in its preferred form;

Fig. 5 is a detail view showing the appliance connected to a cast iron coil-pipe instead of the threaded iron pipe shown in Fig. 1.

In the drawing annexed, 10 designates, generally, a cast iron T-fitting adapted to be built into the wall of a building, one of its nipples 11 being extended horizontally through the plastering or other wall coating, where it will be in position for convenient connection to the gas-discharge pipe 12 of the stove 13. It is desirable for neatness that this nipple shall terminate flush with the face of the wall, as shown in dotted lines in Fig. 2. This nipple is provided with an inside sleeve 14 which is connected to the nipple 11 by means of lugs 15. This adapts the nipple for the proper reception of the discharge-end of the gas-pipe 12, and the lugs 15 form a stop to prevent the inner end of the pipe 12 from being extended into the down-passage of the appliance, where it would collect water and rust-scale.

The upper nipple 16 of the appliance is adapted for connection to an iron pipe 17 which is extended through the roof of the building for the purpose of carrying off the obnoxious gases.

The downwardly-extending nipple 18 is connected to an iron discharge-pipe 19 which extends downwardly through the wall to a suitable discharge point, the purpose of this pipe 19 being to carry off whatever water gets into the ventilating-pipe 17 or collects therein by way of condensation. The nipple or branch 18 is tapered downwardly its full length to thereby insure not only the water entering the discharge-pipe 19, but also any rust-scale that may fall down from the pipe 17. The interior tapering of this depending branch 18 is an important feature of my device, as I have found in practice that enough rust-scale gets down from the pipe 17 to stop up the comparatively small discharge-pipe 19 if it is allowed to accumulate in the branch or nipple 18. As shown in Fig. 5, I may connect the discharge-end of my appliance directly to a soil-pipe 20, if desired.

I may also provide an additional means for keeping the falling rust-scale out of the pipe 19; for instance, I may provide the appliance with a chute 21 which consists of a tube extending upwardly into the leg 18 and having its upper end terminate centrally thereof, while its other end discharges through the side of the leg 18. This chute will catch practically all of the scale that falls from the pipe 17 and discharge it laterally out of the appliance. I have noticed that this scale tends to fall down through the center of the appliance and it is for this reason, as stated, that this chute will discharge most of the scale. It will be understood that I may vary the details of construction without departing from the spirit of my invention as defined in the claims.

It will be observed that an important feature of my device is that I provide a structure which will insure that whatever water gets into the roof-pipe 17 will trickle down the inside walls of the same and the fitting and the discharge-pipe 19, while the rust particles, which fall down centrally into the fitting from time to time, during the life of the device, will be discharged entirely out of the fitting through the medium of the chute. I have found that the chute also performs another important function, namely, as a relief-passage or outlet for the down draught. Occasionally there is a strong down draught through the discharge-pipe 17 and, unless this air pressure is relieved, it is liable to enter the pipe leading to the gas-stove and put out the flames thereof, thus leaving the stove in a dangerous condition. With the fitting provided with the relief-passage or port afforded by the chute, the force of the down draught is broken and the danger is eliminated. It will be understood that the nipples 11 and 14 are spaced with reference to each other to nicely fit the end of this stove-pipe to thus firmly support the same inside and out at that point.

What I claim as new is:

1. An appliance of the class set forth consisting of a tubular body having a lateral nipple at a point between its ends adapted for setting in the wall of a building to receive the gas-discharge pipe and also provided with an interiorly tapering depending leg or branch adapted at its lower end to be connected to a depending discharge-pipe whose interior diameter is at least equal to the diameter of the lower, tapered end of said leg to thus avoid forming an interior shoulder.

2. An appliance of the class set forth con-

sisting of a tubular body having a lateral nipple at a point between its ends adapted for setting in the wall of a building to receive the gas-discharge pipe and also provided with an interiorly tapering depending leg or branch adapted at its lower end to be connected to a depending discharge-pipe, said leg or branch being provided with a scale-discharge chute extending inwardly and upwardly to position its mouth to receive scale as it falls from the ventilating-pipe, said discharge-pipe serving also as a down-draft relief outlet.

In testimony whereof I hereunto affix my signature.

FRANK E. WILT.