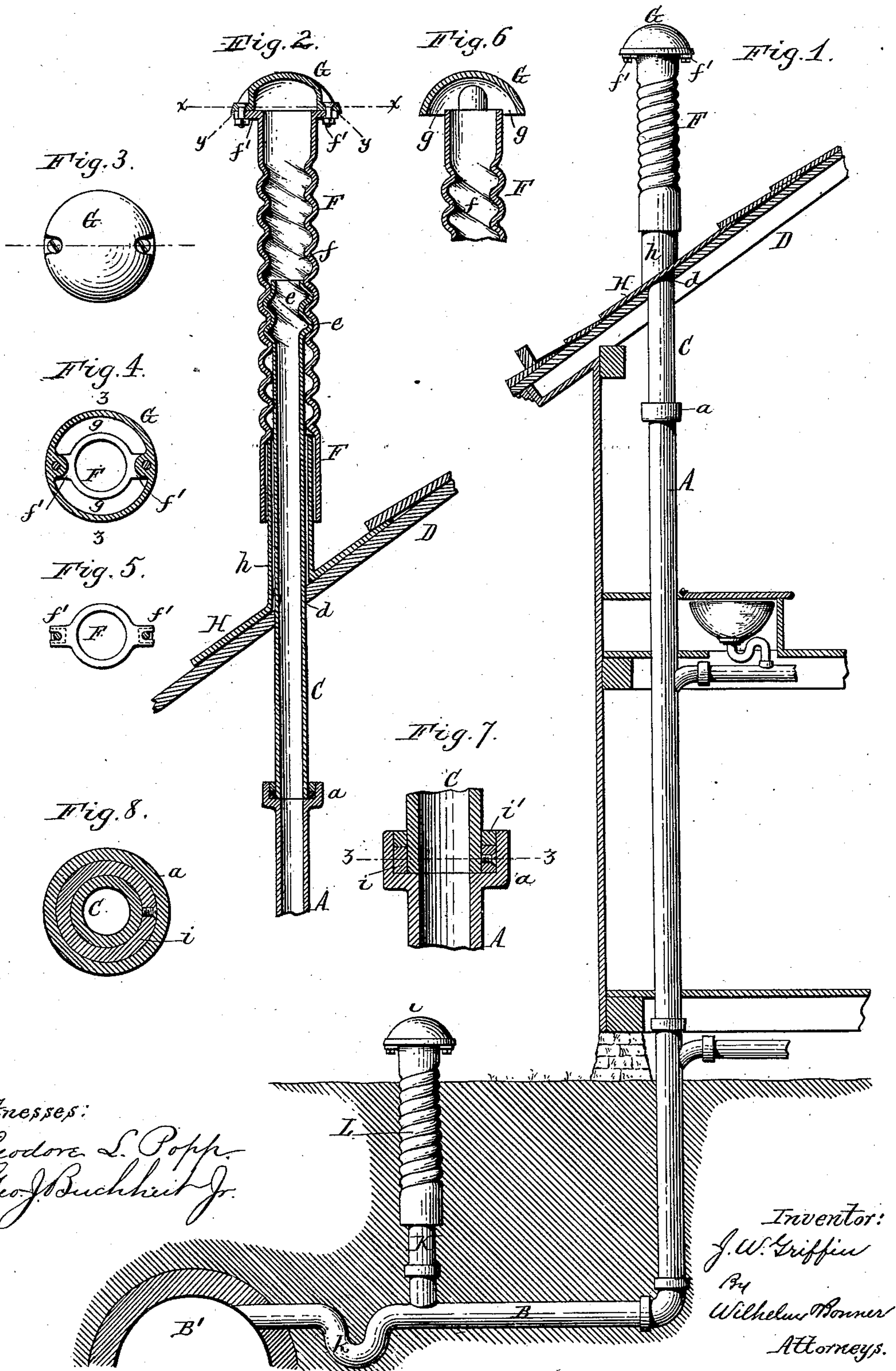


(No Model.)

J. W. GRIFFIN.
VENTILATOR FOR SOIL PIPES.

No. 358,262.

Patented Feb. 22, 1887.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. GRIFFIN, OF BUFFALO, NEW YORK.

VENTILATOR FOR SOIL-PIPES.

SPECIFICATION forming part of Letters Patent No. 358,262, dated February 22, 1887.

Application filed December 6, 1886. Serial No. 220,762. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. GRIFFIN, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Ventilators for Soil-Pipes, of which the following is a specification.

This invention relates more particularly to an improvement in the ventilating-pipes which are connected with the soil-pipe in buildings and extend above the roof thereof, and has for its object to provide a simple and inexpensive water-tight joint between the ventilating-pipe and the roof of the building, and to render the ventilating-pipe vertically adjustable.

The invention consists of the improvements which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a fragmentary vertical section of a building, showing the soil-pipe extending from the sewer through the building and provided with my improvement. Fig. 2 represents a vertical section, on an enlarged scale, of the upper portion of the soil-pipe with the ventilator attached thereto and extending through the roof of the building. Fig. 3 is a top plan view of the ventilating-pipe. Figs. 4 and 5 are cross-sections in lines *xx* and *yy*, Fig. 2, respectively. Fig. 6 is a vertical cross-section in line *zz*, Fig. 4. Fig. 7 is a vertical section, on an enlarged scale, of the joint connecting the ventilating-pipe with the soil-pipe. Fig. 8 is a cross-section in line *zz*, Fig. 7.

Like letters of reference refer to like parts in the several figures.

A represents the upright soil-pipe which extends through the building, and is connected below the ground with the drain-pipe B, which leads to the sewer B'. The soil-pipe A extends upwardly through the different floors of the building to within a short distance below the roof, and is provided at its upper end with a socket, *a*.

C represents the ventilating-pipe, which is secured with its lower end in the socket *a* of the soil-pipe. The ventilating-pipe C projects through an opening, *d*, in the roof D, and is provided at its upper end with a screw-thread, *e*, which may be a single or a double thread, as may be preferred.

F represents a pipe or tubular cover, which surrounds the pipe C above the roof D, and is

provided with an internal screw-thread, *f*, which engages over the screw-thread *e* of the pipe C. The pipe F is provided at its top with laterally-projecting lugs or ears *f'*, to which is secured a cap, G. The cap G is constructed in the form of a bell or inverted cup, and projects beyond the outer edge of the pipe F and rests with its lower edge upon the lugs *f'*. The cap G protects the top of the pipe F from the weather and permits the escape of the foul gases through the openings *g* between the lower edge of the cap and the top of the pipe F.

H represents a plate of lead or other suitable metal, which is secured to the roof D around the pipe C, and provided with an upwardly-projecting sleeve or collar, *h*, which is preferably cast or formed in one piece with the plate H. The sleeve *h* surrounds the pipe C above the roof, and its upper portion is inclosed by the pipe F, the lower portion of the latter below the screw-threads *f* being large enough to permit it to be easily passed over the sleeve *h*. The upper portion of the plate H is covered by adjacent shingles or other covering of the roof. The plate H is secured to the roof with its sleeve *h* registering with the opening *d*. The pipe C is inserted from above through the sleeve *h* and plate H, and its lower end seated in the socket *a* of the soil-pipe. The pipe C is firmly secured in the socket of the soil-pipe by a collar, *i*, which is fastened to the end of the pipe C and held in the socket by a filling or packing of lead, *i'*. The cover F is now applied to the pipe C and screwed down until its lower end extends over the sleeve *h*, thus forming a water-tight joint around the opening in the roof. By this means a solder-joint is dispensed with and the dangers attending the formation of solder-joints near wood-work are avoided, while a more durable joint is produced.

K represents the lower ventilating-pipe or air-inlet pipe connected with the drain-pipe B, between the main trap *k* and the soil-pipe A, and extending above the surface of the ground. The pipe K is provided with an external screw-thread, to which a tubular cover, L, is applied, which is provided with a corresponding internal screw-thread. The cover L is provided with a cap, *l*, which projects beyond the upper edge of the cover L, so as to admit the external air to the same. The air passes down-

wardly through the cover L and pipe K, then inwardly through the drain-pipe B, and upwardly through the soil-pipe A, and out through the ventilator.

5 By adjusting the tubular cover L on the pipe K, the cap l of the cover can be located at the desired height above the ground.

I claim as my invention—

10 1. The combination, with the ventilating-pipe extending through the roof, of a plate, H, resting on the roof, and provided with a collar, h, surrounding the ventilating-pipe, and a tubular cover, F, surrounding the ventilating-pipe and the collar h and made vertically adjustable on the ventilating-pipe, substantially as
15 set forth.

2. The combination, with the soil-pipe, of a ventilating-pipe extending through the roof of the building and provided above the roof with an external screw-thread, a plate, H, secured 20 to the roof and provided with a collar, h, which surrounds the ventilating-pipe, and a tubular cover, F, provided with an external screw-thread and surrounding the ventilating-pipe and the collar h, substantially as set forth. 25

Witness my hand this 20th day of November, 1886.

JOHN W. GRIFFIN.

Witnesses:

JNO. J. BONNER,
CARL F. GEYER.