

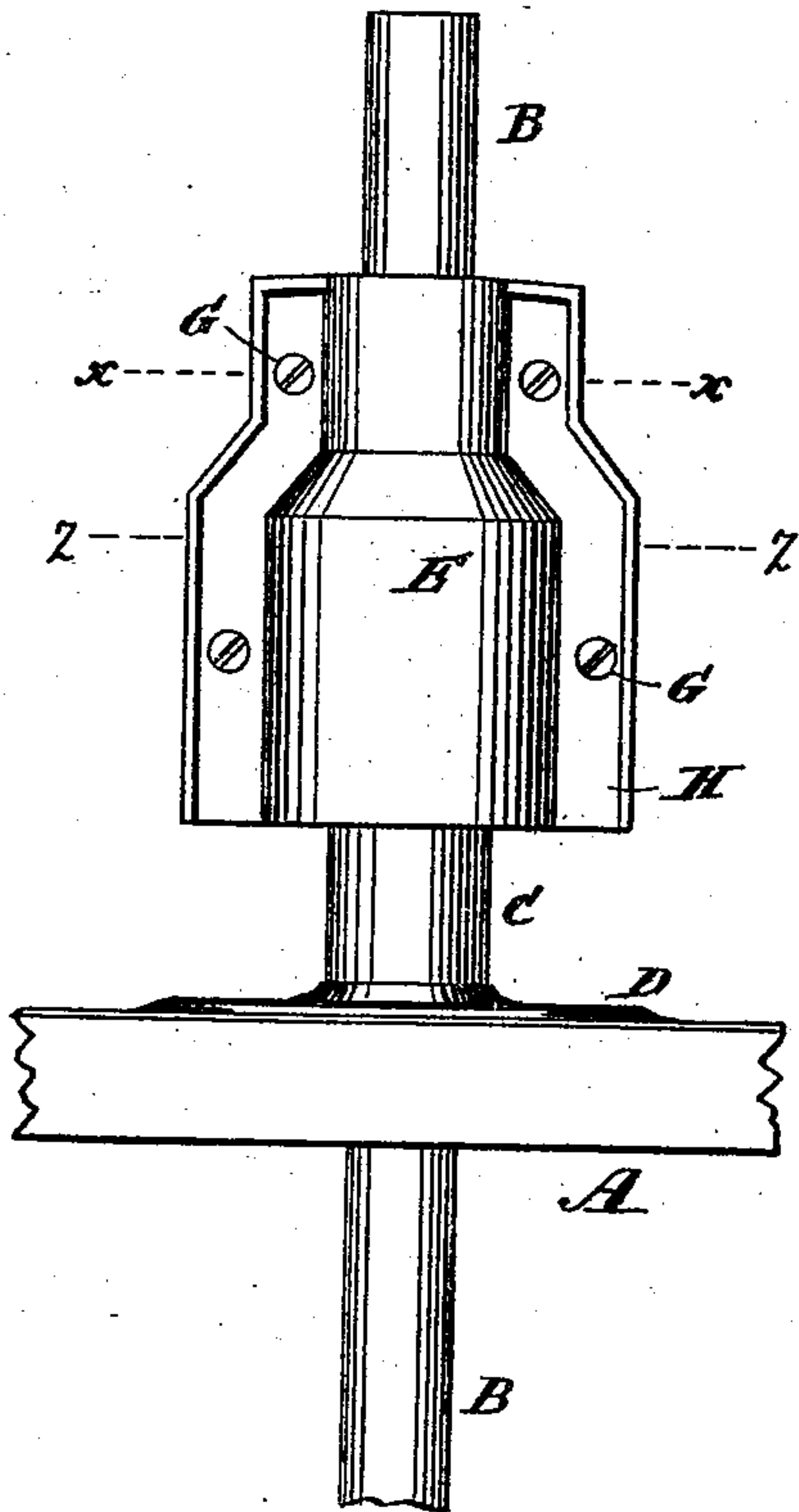
(No Model.)

J. HEIDENREITER.  
VENT PIPE.

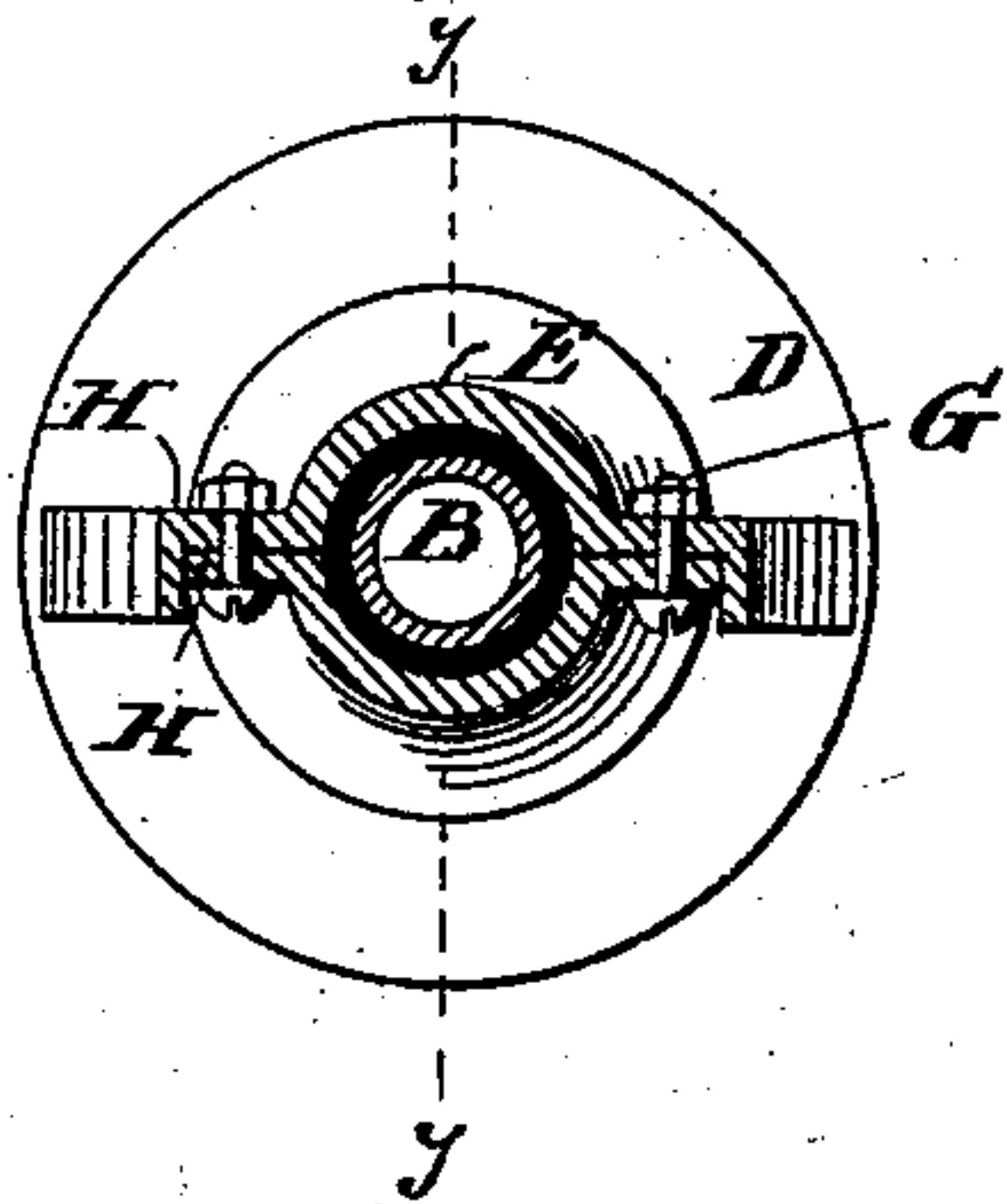
No. 501,835.

Patented July 18, 1893.

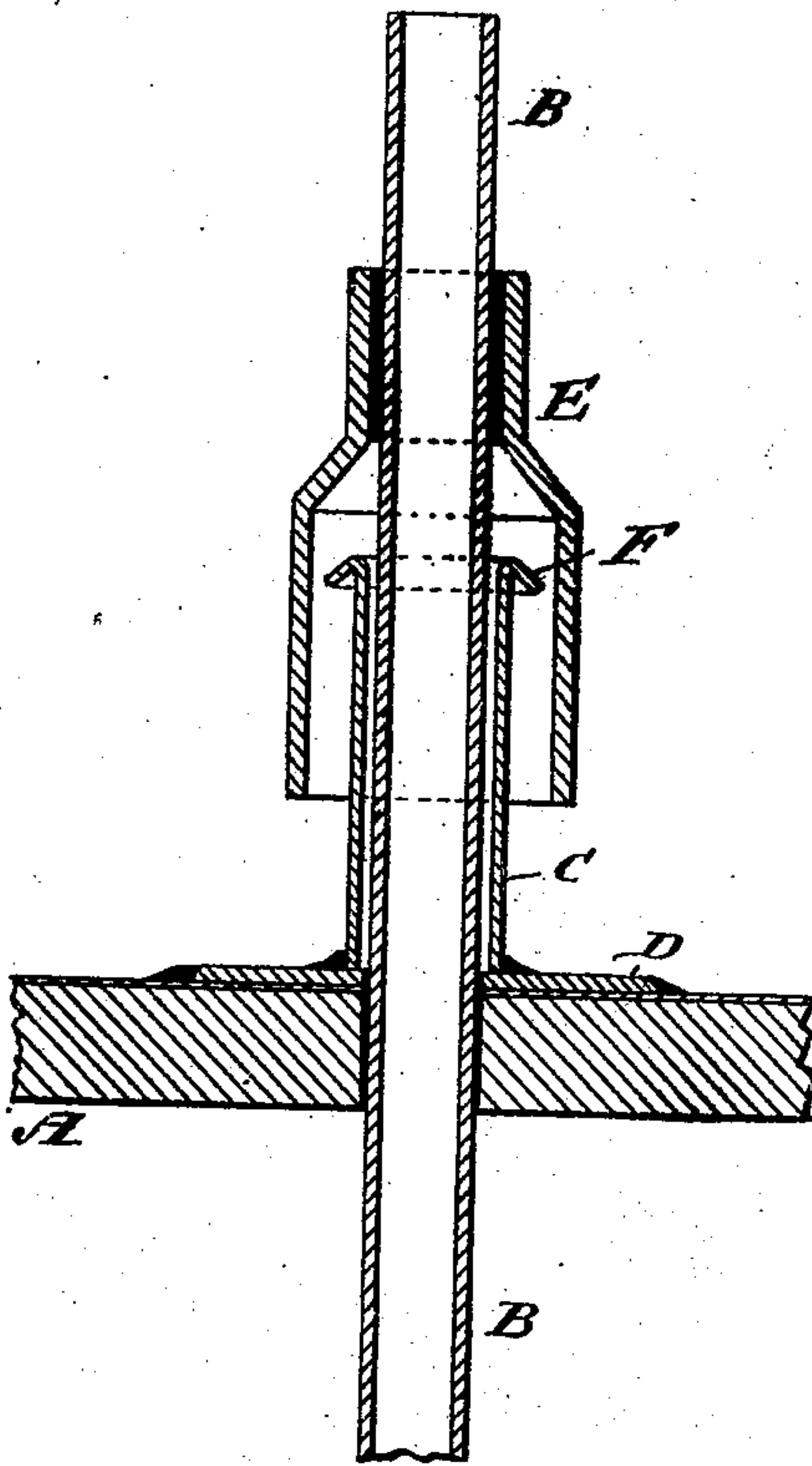
*Fig. 1.*



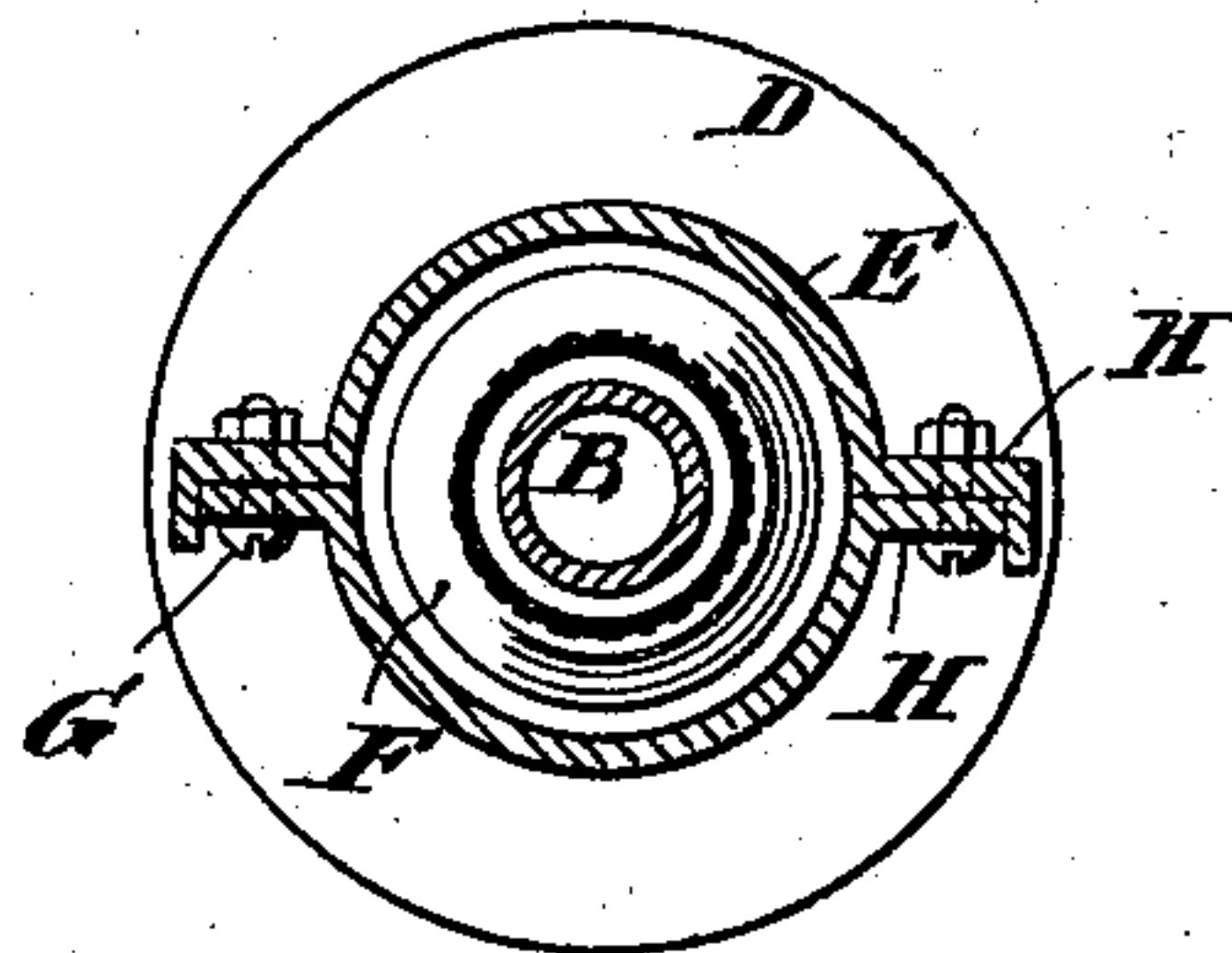
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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BY

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# UNITED STATES PATENT OFFICE.

JOSEPH HEIDENREITER, OF BROOKLYN, NEW YORK.

## VENT-PIPE.

SPECIFICATION forming part of Letters Patent No. 501,835, dated July 18, 1893.

Application filed March 16, 1893. Serial No. 466,310. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HEIDENREITER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Vent-Pipes, of which the following is a specification.

The object of this invention is to prevent the breakage or ruptures which occur between vent pipes and roofs and the invention consists in the novel features set forth in the following specification and claim and illustrated in the annexed drawings in which—

Figure 1 is an elevation of the vent pipe. Fig. 2 is a section of the pipe along  $x x$  Fig. 1. Fig. 3 is a section along  $y y$  Fig. 2. Fig. 4 is a section along  $z z$  Fig. 1.

In the drawings the letter A indicates a roof of a building. These roofs are frequently tinned but my invention is applicable to others than tin roofs. The roof has an opening or hole through which extends a vent pipe B. Said pipe is loose or detached from the roof. The sleeve C loosely surrounds the vent pipe and said sleeve is sealed or secured water tight to the roof. A convenient way I have found is to provide the sleeve C with a foot or base D which can be soldered or secured water tight to the roof so that no water or moisture can enter or penetrate about sleeve C.

The pipe B is provided with a cap E tightly sealed or secured thereto so that no moisture can enter or penetrate between pipe B and cap E. The lower part of cap E is flanged or expanded so as to surround or overhang the sleeve C so that the cap E prevents rain or moisture from entering or penetrating between pipe B and sleeve C. By providing the sleeve C with a flange F extending toward or corresponding with the flanged portion of cap E snow or dust will be impeded or stopped from blowing in between cap E and sleeve C and thence between sleeve C and pipe B. The cap can be readily formed or cast in two sections or halves secured about pipe B by bolts or fastenings G in flanges H.

The vent pipe has heretofore been sealed or soldered directly to the roof. A disadvan-

tage of this method I have found is that if the building settles, as frequently happens especially in new buildings, the joint between the vent pipe and the roof may crack or rupture, thus allowing moisture to penetrate or cause injury. Also if the vent pipe is used to carry off exhaust steam from an engine the continual puffing and consequent jars of the pipe are apt to loosen or rupture the joint between the vent pipe and the roof. If the vent pipe is used to ventilate sewer traps or waste pipes in a building said pipe is not so apt to be jarred but persons walking on the roof at times kick or strike the vent pipe and thus comes injury.

By having the vent pipe B extending loosely through the hole in the roof the latter or the pipe can be moved or jarred independently without affecting the joint between the roof and the sleeve C, and any kick or blow on the pipe B will not be communicated directly or forcibly if at all to the sleeve C so that the joint between the latter and the roof is not so apt to become injured. By securing the cap E so that it will overhang but not rest upon the sleeve C the pipe B can sink or settle to some extent in or through the sleeve C without affecting the latter.

What I claim as new, and desire to secure by Letters Patent, is—

The combination with a roof having a hole, and a vent pipe extending loosely through the hole, of a surrounding sleeve C secured to the roof and having its upper end portion provided with a laterally projecting flange F, and a cap E secured to the vent pipe and having an expanded lower portion into which the laterally flanged upper end of the sleeve extends, substantially as and for the purpose described.

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

JOSEPH HEIDENREITER.

Witnesses:

WM. C. HAUFF,  
E. F. KASTENHUBER.