

SEARCH ROOM

No. 866,762.

PATENTED SEPT. 24, 1907.

B. T. WILSON.

NOISE DEADENING MEANS FOR DRAIN PIPES.

APPLICATION FILED AUG. 31, 1906.

Fig. 1.

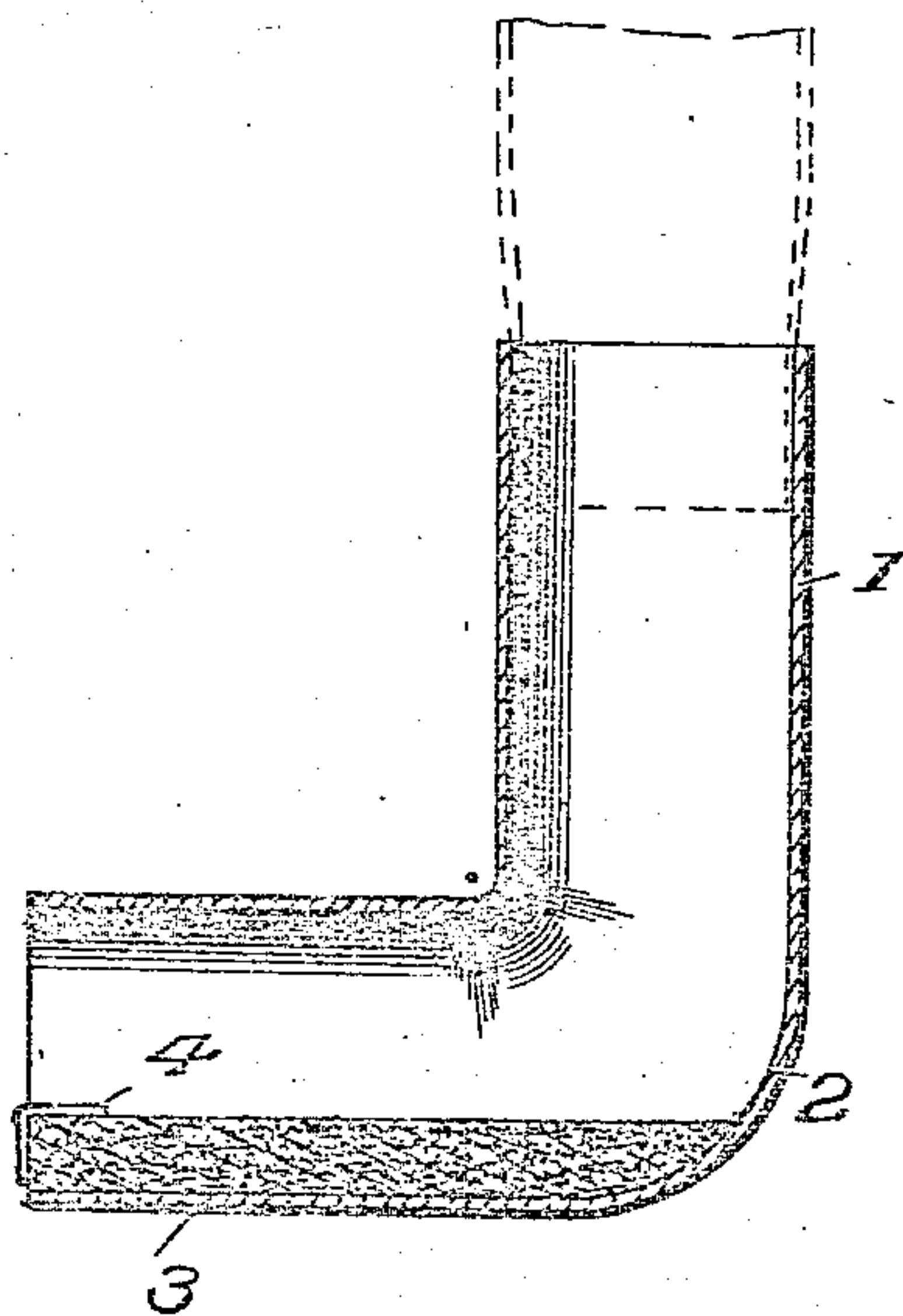


Fig. 2.

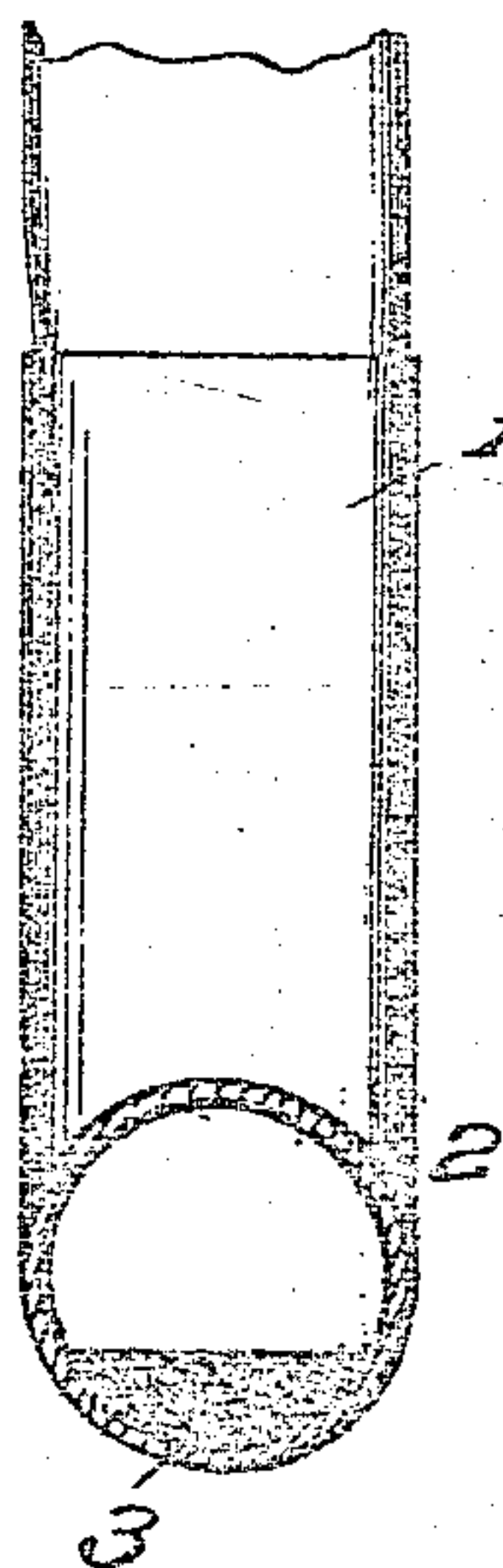


Fig. 3.

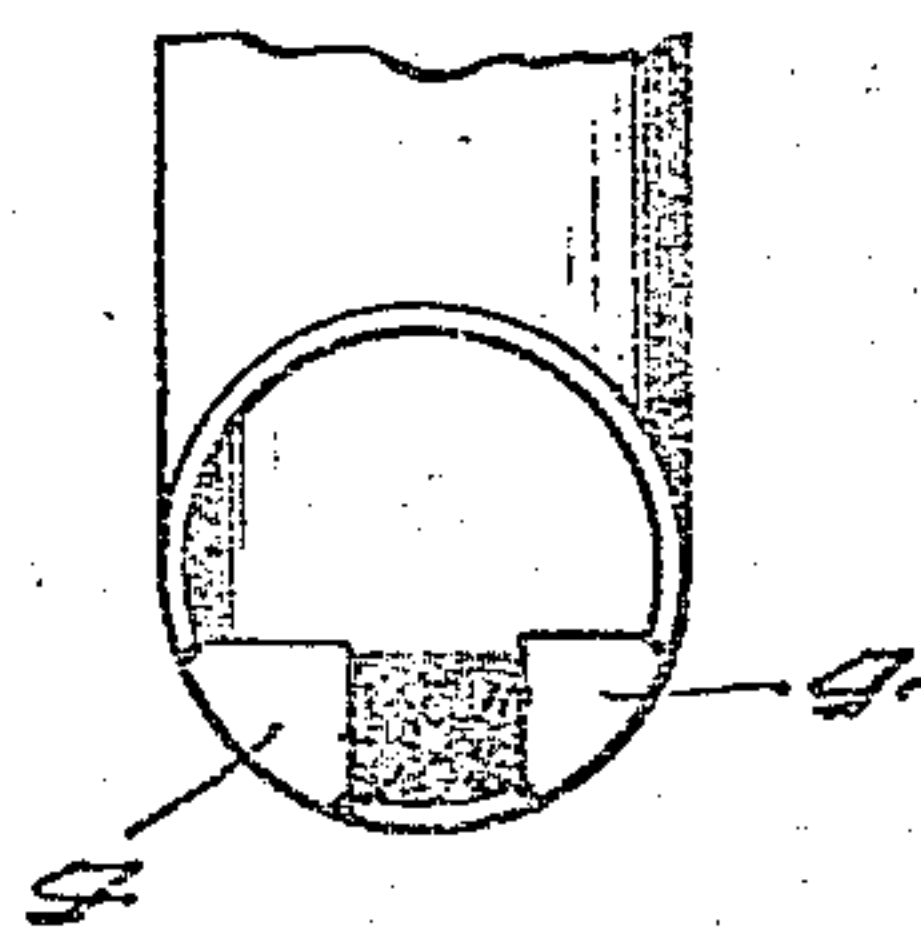
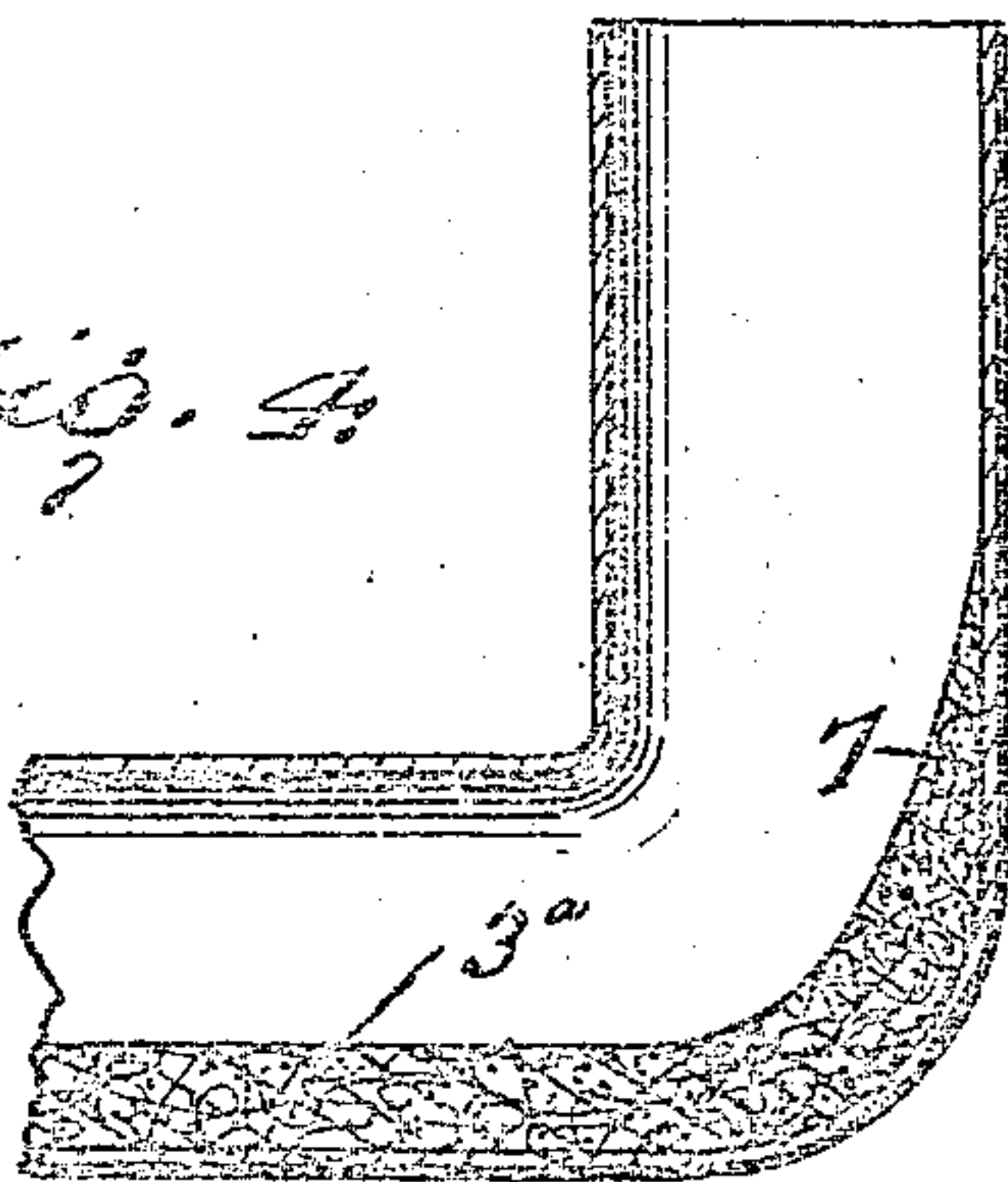


Fig. 4.



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UNITED STATES PATENT OFFICE.

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NOISE-DEADENING MEANS FOR DRAIN-PIPES.

No. 866,762.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed August 31, 1906. Serial No. 332,824.

To all whom it may concern:

Be it known that I, BEN T. WILSON, a citizen of the United States, residing at Nacogdoches, in the county of Nacogdoches and State of Texas, have invented certain new and useful Improvements in Noise-Deadening Means for Drain-Pipes, of which the following is a specification.

This invention relates to metallic drain pipes for dwellings and particularly of the type embodying an outlet elbow at the lower end from which the drain water passes in its exit from the pipe.

The essential feature of the invention resides in the provision of means for preventing the disagreeable sounds issuing from the pipe and caused by the falling water dropping to the lower end thereof especially during a rain and some time after a rain, while the water upon the roof or other portion of the dwelling is being carried off through the drain pipe.

The disadvantages of the common forms of metallic drain pipes subjected to the above conditions of service are apparent from the foregoing and it is the aim of the present invention to eliminate such disadvantages and make the draining of water from a dwelling through drain pipes of the above mentioned structure, practically noiseless after rains and during light rains.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view showing the lower terminal or end portion of an ordinary drain pipe with the noise deadening means applied thereto. Fig. 2 is a front elevation. Fig. 3 is a front elevation bringing out more clearly the means for securing the noise deadening base to the drain pipe. Fig. 4 is a sectional view embodying a modification of the invention.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The invention is very simple and specifically describing the same as applied, the numeral 1 indicates the vertical or body portion of a drain pipe at the lower end of which is located the elbow 2 through which the drain water passes from the pipe 1. The pipe 1 is of metallic construction and the passage of drain water through the pipe necessarily gives rise to the disagreeable noise incident to the sound caused by the dropping of the water upon the bottom portion of the elbow 2 especially after a rain. In carrying out the invention, the bottom portion of the elbow 2 has a base made of noise deadening material or substance,

shown at 3, which base is attached to the elbow 2 in any suitable way upon the interior portion of the latter, extending the entire length of the elbow so far as the transverse extent of the latter is concerned. The base 3 may be of stone, composition, or any other substance, having a tendency to reduce or do away with entirely, all sound or noise incident to the dropping or falling of the water through the pipe 1 upon the elbow 2. The noise deadening base 3 of the elbow 2, with reference to its specific construction, is flat upon its upper side and is convex upon its under side to conform with the curvature of the bottom portion of said elbow 2. Fastenings 4 are illustrated as the means for attaching the base 3 to the elbow 2, it being understood that any substantial and desirable form of fastenings may be utilized.

Various modifications may be made in carrying out the present invention, the broad principle involved being to locate at the lower end of a metallic drain pipe 1, a noise deadening base or means of equivalent nature to accomplish the desired result. The modifications are not illustrated as they may be varied within the contemplation of the invention.

The preferred means for securing the base 3 to the drain pipe 1 consists of lugs 4 formed at the outer end of the horizontal portion of the elbow 2 and adapted to extend upwardly and engage the outer extremity of the base 3 to hold the latter in proper position and prevent likelihood of accidental displacement thereof.

In the operation of the invention illustrated in Fig. 4, the base 3^a is formed with an upward extension at its inner end which is designed to insure that the noise deadening substance will accomplish the desired result, in the practical embodiment or use of the invention.

It will be understood that in both of the constructions of the invention illustrated, the interior side portion of an arm of the elbow of the drain pipe is provided with noise deadening material or substance. The specific construction of the noise deadening means as shown in Fig. 4 is especially advantageous with regard more particularly to the formation of the upwardly extending portion of the noise deadening element, whereby a curved deflecting surface 7 is provided at the corner of the elbow. The surface 7 is especially desirable by reason of the fact that it does not tend to abruptly turn the flow of water or liquid passing through the pipe but causes such flow to gradually pass off to the lower arm of the elbow, thus subserving the noise deadening function of the base 3^a constituting the noise deadening element. The lugs 4 shown in Fig. 3 most clearly, are preferably integral extensions of the pipe elbow.

Having thus described the invention, what is claimed as new is:

1. In means of the class described, the combination of a drain pipe embodying a connected elbow, the interior side portion of an arm of said elbow being provided with a noise deadening base, the outer portion of the arm of the elbow to which the said base is applied being formed with integral lugs engaging the base to hold the latter in operative position.
2. In means of the class described, the combination of a

drain pipe, an elbow connected therewith, a noise deadening base applied to the interior side portion of an arm of the elbow and having an extension forming a curved deflecting surface at the corner of said elbow, and means for prevent displacement of the noise deadening base.

In testimony whereof I affix my signature in presence of two witnesses.

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Witnesses:

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