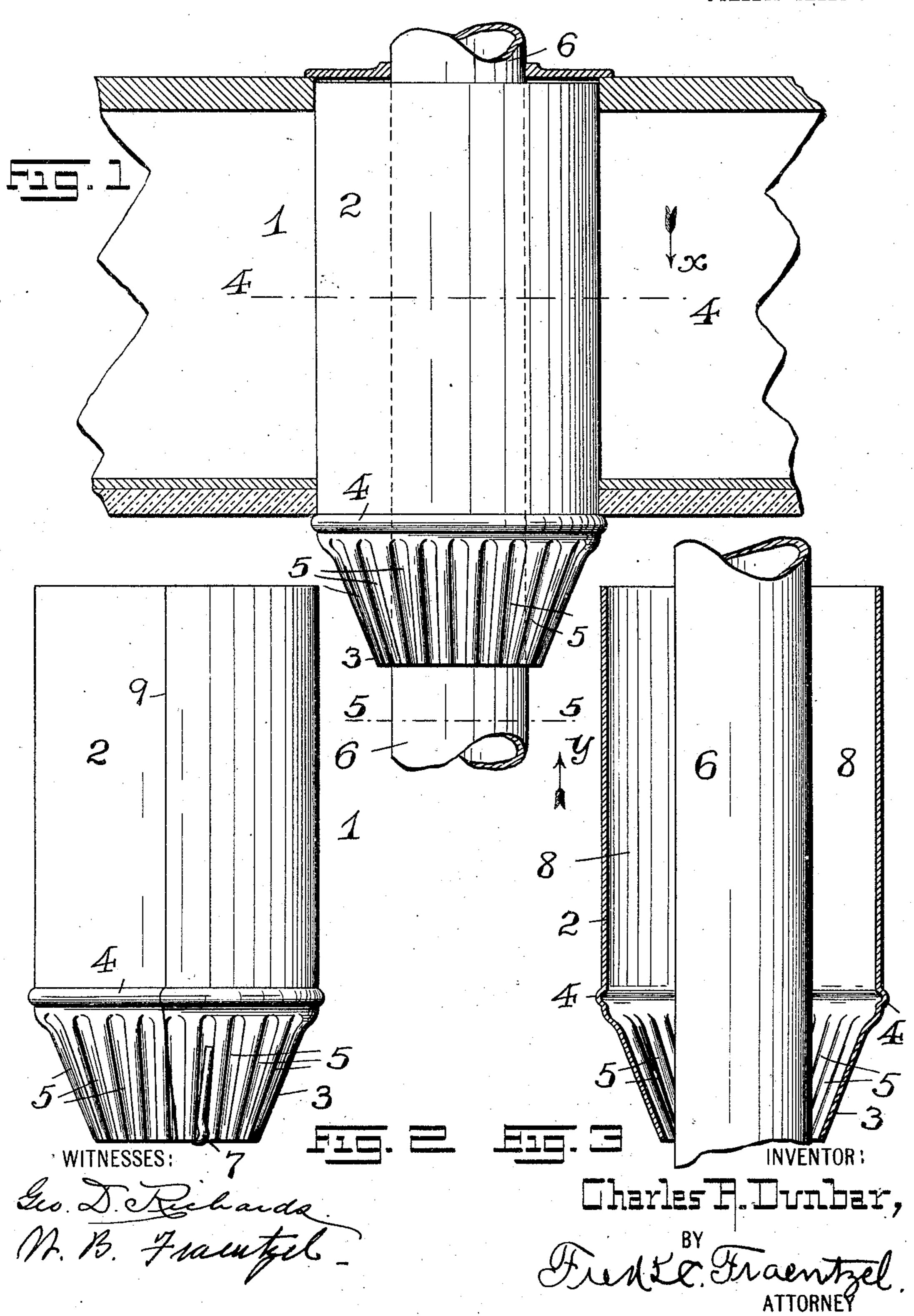
C. A. DUNBAR. PIPE THIMBLE.

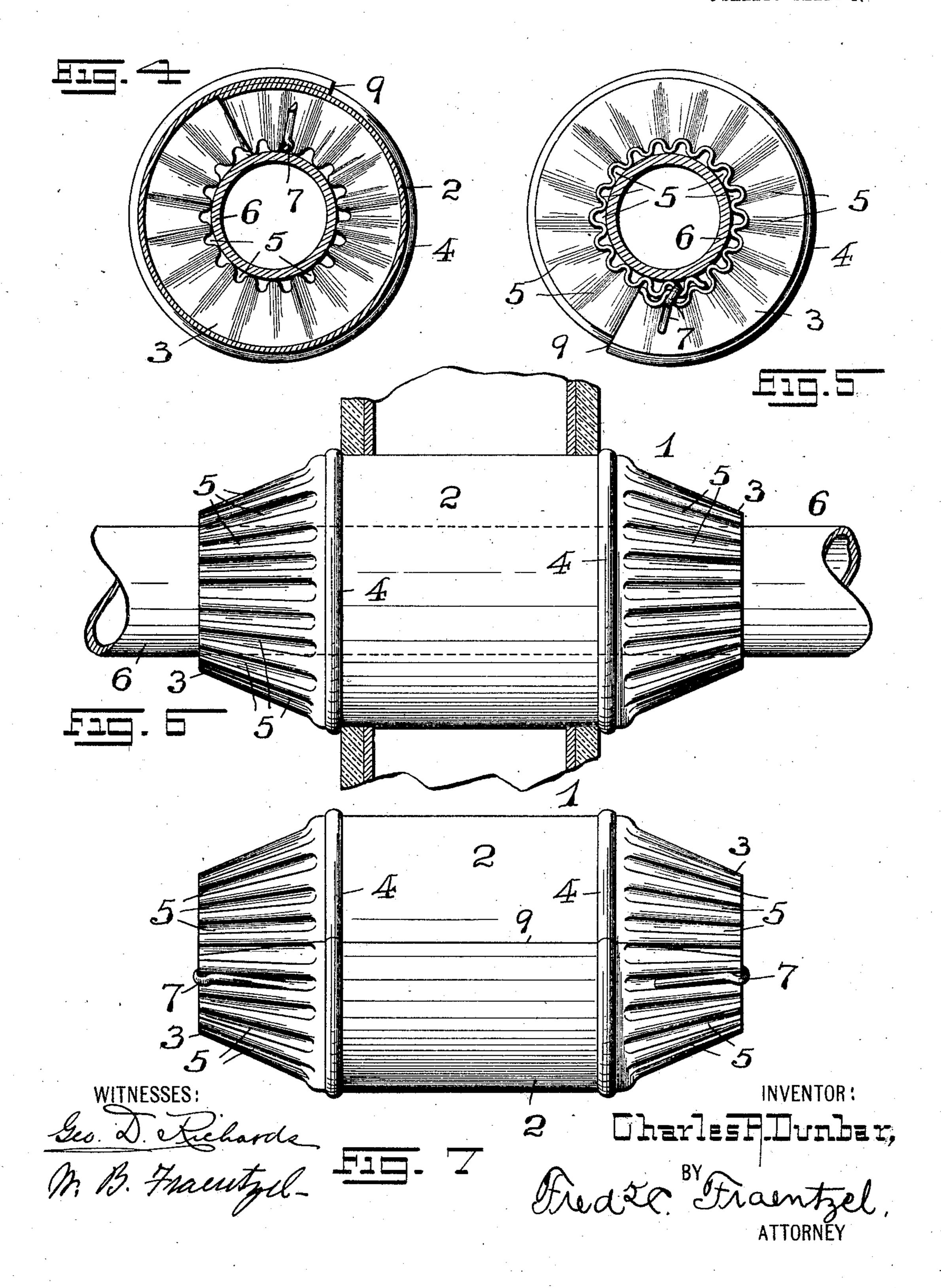
APPLICATION FILED NOV. 19, 1903.

3 SHEETS-SHEET 1.



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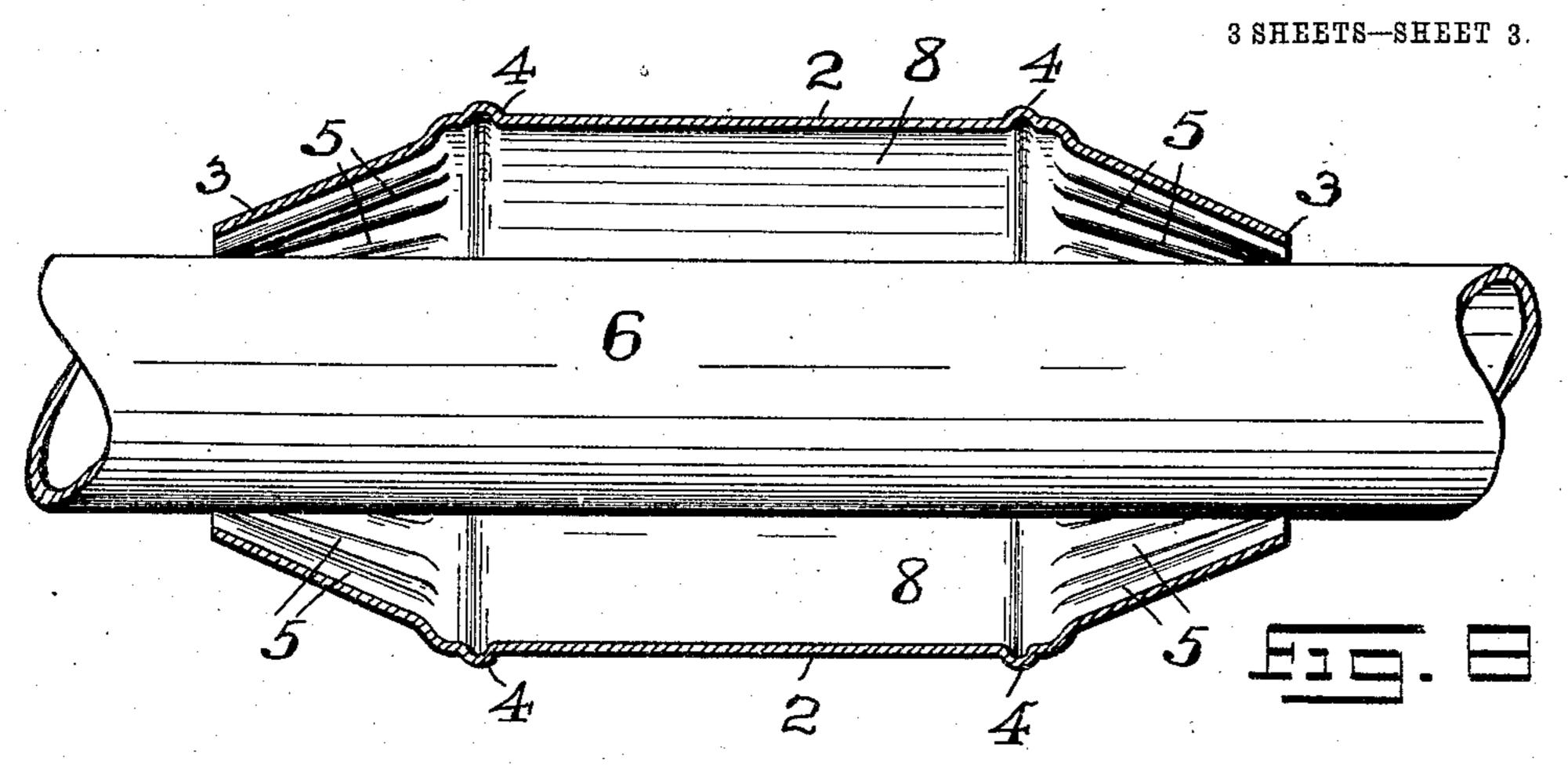
3 SHEETS-SHEET 2.

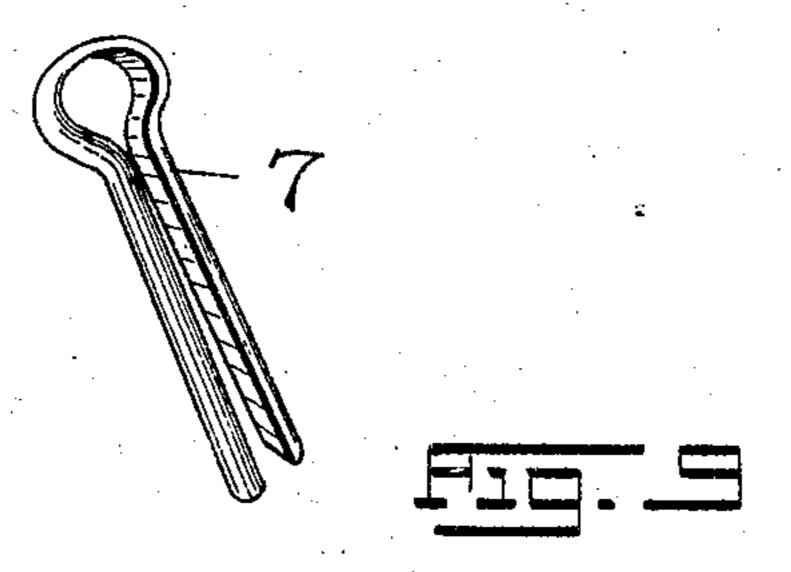


C. A. DUNBAR.

PIPE THIMBLE.

APPLICATION FILED NOV. 19, 1903.





Seo Declardo M. B. Frantel. Interles F. Dunbar,

By Cantzel,

United States Patent Office.

CHARLES A. DUNBAR, OF NEWARK, NEW JERSEY.

PIPE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 785,543, dated March 21, 1905.

Application filed November 19, 1903. Serial No. 181,751.

To all whom it may concern:

Be it known that I, Charles A. Dunbar, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Pipe-Thimbles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention has reference to that class of pipe-thimbles, ordinarily termed "ceiling" or wall" or "partition" sleeves, to be used with steam or hot-water pipes of heating systems for buildings and the like; and the present in-20 vention has for its primary object to provide a novel construction of pipe-thimble of the character and for the purposes hereinafter more particularly specified, the thimble being preferably made from sheet metal and having 25 one or both of its end portions, according to its use as a ceiling or a wall or partition sleeve, made with a reduced portion in the form of a truncated cone, which is snugly fitted about the pipe at the point or points where the pipe 30 enters a ceiling or where the pipe extends from the opposite sides of a wall or partition to provide an ornamental finish at such points and to dispense with the usual ceiling or wall plates now in use.

The invention consists in the general construction of pipe-thimbles for the piping of heating systems, as will hereinafter appear.

The invention is clearly illustrated in the

accompanying drawings, in which—

Figure 1 is a side elevation of a pipe-thimble embodying the principles of my present invention and a representation of a portion of a pipe with which the same is employed, the ceiling and flooring above the same being both represented in section. Fig. 2 is a face view of the pipe-thimble detached from the pipe, and Fig. 3 is a longitudinal vertical section of the same in position upon a portion of piping. Fig. 4 is a horizontal section taken on line 4.4 in Fig. 1 looking in the direction of the ar-

row x, and Fig. 5 is a similar section taken on line 5 5 in said Fig. 1 looking in the direction of the arrow y. Fig. 6 is á side elevation of a pipe-thimble embodying the principles of this invention and a representation of 55 a portion of a pipe with which the sleeve is employed, the parts being represented in position in a wall, said wall being shown in vertical section. Fig. 7 is a side elevation of the said thimble; and Fig. 8 is a longitudinal ver- 60 tical section of the same in position upon a piece of piping, the piping being represented in elevation. Fig. 9 is a perspective view of a cotter-pin employed with the reduced end portions of the thimbles represented in said 65 figures of the drawings.

Similar characters of reference are employed in the above-described views to indi-

cate corresponding parts.

Referring now to the said drawings, the 70 reference character 1 indicates the complete pipe-thimble indicated in the several figures of the drawings, the same being preferably made from sheet metal, which is rolled in such a manner that the normal tendency of the 75 metal sheet is to roll upon itself, and thereby assume the form shown. The tubular body 2 of the said form is provided at one or both of its end portions with the reduced parts 3, forming when the sheet is in its rolled condi- 80 tion a frusto-conical portion at the one end of the thimble, as indicated in Figs. 1, 2, and 3, or at both ends of the thimble, as represented in Figs. 6, 7, and 8. Each reduced part 3 is connected with the said main body 85 2, preferably by a bead or other ornamental shoulder 4, and the frusto-conical portion 3 at the one or at each end of the thimble is preferably provided with longitudinally-extending convolutions or corrugations 5. The preferred 90 form of thimble 1 is made from a piece of sheet metal which can be opened out so as to be placed about a pipe 6 of any suitable diameter, the tendency of the said sheet of metal being to wrap itself about the pipe, its re- 95 duced portion or portions 3 adjusting themselves to the size of the pipe and the parts then being held or locked by means of a suitable cotter-pin 7 in the manner represented in Figs. 2, 4, 5, and 7 or being held in their 100

adjusted position upon the pipe by means of any other suitably-formed holding means, as will be clearly evident. It will thus be seen that the piping can be installed in the ceiling, 5 as indicated in Fig. 1, or in a wall or partition, as represented in Fig. 6 of the drawings, and the thimble in its unrolled relation slipped over the pipe, the thimble immediately wrapping itself about the pipe and readily adjust-10 ing itself to the size of the pipe. This having been accomplished, the workman locks the frusto-conical end portions 3 by means of the cotter-pin 7 or other holding device and then forces the completed thimble along the 15 pipe until the main portion of the body of the thimble rests within the ceiling and flooring or within the wall or partition, as illustrated in the accompanying drawings, and that without the use of any other fastening means. In 20 this manner the break or opening in the ceiling or in the wall through which the pipe is passed is closed by means of the ornamental end portion or member 3, whereby a complete and ornamental finish is produced at a slight 25 expense in cost of manufacture, material, and labor.

of the drawings it will be seen that a large open space 8 is formed between the inner portion of the tubular body 2 of the thimble and the outer cylindrical surface of the pipe 6, to which air is conducted by the passage-ways or channels formed by the convolutions or corrugations 5 with the cylindrical surface of the pipe 6 at the points where the said frustoconical end portions 3 hug the said pipe. Thus a free circulation of air is maintained about the pipe, and all danger of fire or the charring of the woodwork back of the ceiling or in the wall or partition due to the result of overheating is clearly obviated.

When the thimble is in use upon the pipe, the seam 9 and that portion of the member or members 3 upon which the cotter-pin 7 is arranged are turned into such positions that these parts will not be exposed to the view of the ordinary observer, and when the exposed reduced portion or member 3 of the thimble is bronzed, painted, or colored to correspond with the ornamentation of the exposed portions of the pipe or with the coloring of the ceiling or wall an ornamental and sightly finish in the form of a rosette is provided at the points where otherwise an unsightly hole or break in the ceiling or wall would be the result.

Of course I am aware that some changes may be made in the arrangements and combinations of the various parts, as well as in the details of the construction of the sleeve, without departing from the scope of my present invention. Hence I do not limit my inven-

tion to the exact arrangements and combinations of the parts as described in the foregoing specification and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of the said parts.

Having thus described my invention, what I claim is—

1. An adjustable resilient pipe - thimble formed with overlapping meeting edges, and comprising a cylindrical body portion and a reduced frusto-conical end portion the smallest diameter of said end portion being less 75 than that of the smallest pipe with which the device is designed to be used, said end portion having longitudinal corrugations, and a fastening means adapted to coöperate with said corrugations to retain the edges of the 80 thimble in adjusted relation.

2. An adjustable resilient pipe - thimble formed with overlapping meeting edges, and comprising a cylindrical body portion and a reduced frusto-conical end portion the small- 85 est diameter of said end portion being less than that of the smallest pipe with which the device is designed to be used, said end portion having longitudinal corrugations, and a cotter-pin slipped over the overlapping meet- 90 ing edges of the reduced frusto-conical end portion adapted to coöperate with said corrugations to retain the edges of the thimble in adjusted relation.

3. An adjustable resilient pipe - thimble 95 formed with overlapping meeting edges, and comprising a cylindrical body, a bead at each end of the said body, and a reduced frustoconical end portion extending from each bead, the smallest diameter of each end portion being less than that of the smallest pipe with which the device is designed to be used, said end portions having longitudinal corrugations and fastening means adapted to coöperate with said corrugations to retain the edges of the 105 thimble in adjusted relation.

4. An adjustable resilient pipe - thimble formed with overlapping meeting edges, and comprising a cylindrical body portion and a reduced frusto-conical end portion the small- 110 est diameter of said reduced portion being less than that of the smallest pipe with which the device is designed to be used, and a fastening means slipped over the overlapping meeting edges of the reduced frusto-conical end portion to retain the overlapping meeting edges of the thimble in adjusted relation.

In testimony that I claim the invention set forth above I have hereunto set my hand this 17th day of November, 1903.

CHARLES A. DUNBAR.

Witnesses:

FREDK. C. FRAENTZEL, GEO. D. RICHARDS.