No. 718,591. PATENTED JAN. 13, 1903.

L. D. YOUNG.

DUST ARRESTER FOR HOT AIR PIPES.

APPLICATION FILED AUG. 25, 1902.

NO MODEL.

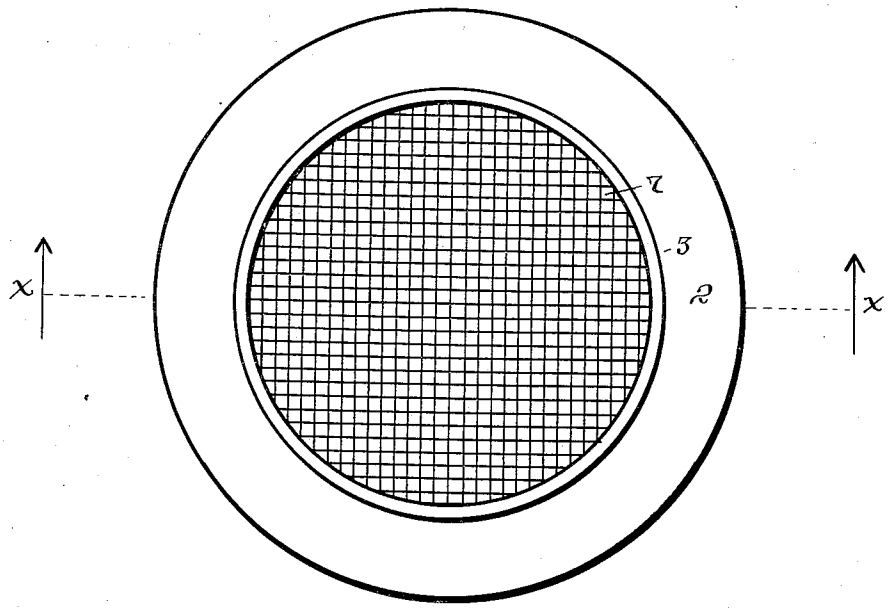


Fig. 1.

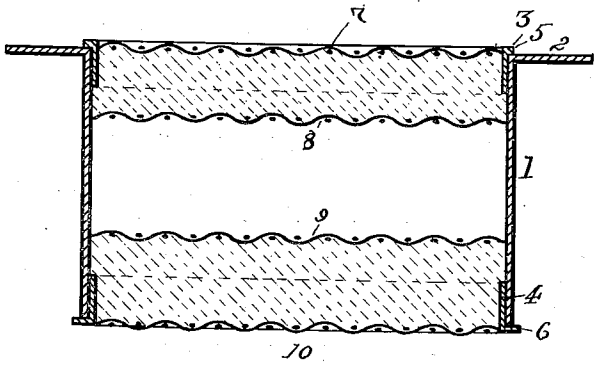


Fig. 2.

Witnesses:

Walter Bowman.

Maude Grisler.

Inventor:

Laura D. Young,

by Humphrey & Humphrey,

her Attorneys.

UNITED STATES PATENT OFFICE.

LAURA D. YOUNG, OF AKRON, OHIO.

DUST-ARRESTER FOR HOT-AIR PIPES.

SPECIFICATION forming part of Letters Patent No. 718,591, dated January 13, 1903.

Application filed August 25, 1902. Serial No. 120,940. (No model.)

To all whom it may concern:

Be it known that I, LAURA D. YOUNG, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Dust-Arresters for Hot-Air Pipes, of which the following is a complete specification.

My invention has relation to improvements in devices for cleansing the air passing through the hot-air pipes from the furnace to the register by removing therefrom particles of dust and soot held in suspension therein and that would otherwise pass into the apartment to be heated and deposited on the walls and furniture.

The object of my invention is to provide a simple and effective device to be placed in the hot-air pipe that will thoroughly remove these particles of dust and soot, so that the hot air will enter the apartment wholly freed therefrom; and a further object is to provide a number of cleansing-layers in the same appliance; and a final object is to so construct the appliance that these layers may be removed from time to time as they become charged with dust and soot.

To the accomplishment of the aforesaid objects my invention consists in the peculiar and novel construction, arrangement, and combination of parts hereinafter described and then specifically pointed out in the claim, reference being had to the accompanying drawings, which form a part hereof.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different views, Figure 1 is a plan of my invention, and Fig. 2 a section of the same at the line x x of Fig. 1.

Referring to the figures, 1 is a short cylindrical case having at its upper end a flange 2, adapted to rest on the end of the hot-air induction-pipe. Extending across this case 1 are diaphragms 8 9, of coarse wire-netting, slightly separated from one another. Telescopically fitting the ends of this case 1 at either end are circular rims 3 4, having flanges 5 6 to arrest their complete entrance into the cylinder 1, but so close fitting as to be retained by friction. Across the rims 3 4 are secured diaphragms of coarse wire-netting 7 8, respectively, and the spaces between the diaphragms 7 8 and 9 10 are loosely filled with light fluffy layers of asbestos in fleecy condition. This fleecy mass of asbestos, which is incombustible, affords a free progress for the heated air, while at the same time it constitutes an effective resistance to any articles held in suspension, thereby constituting a practical strainer for the air.

Although only two diaphragms of asbestos wool are shown, it is manifest that their number may be increased without departing from my invention, which is—

An improved hot-air cleanser for furnace-pipes which consists of an inclosing case, diaphragms extending across said case and separated from each other, made up of coarse wire-netting, telescoping rings adapted to enter either end of said case each provided with a diaphragm of wire-netting and a stratum of fluffy asbestos between the diaphragms in the rims and the diaphragms in the case.

In testimony that I claim the above I hereunto set my hand in the presence of two subscribing witnesses.

LAURA D. YOUNG.

In presence of—
C. P. HUMPHREY,
C. E. HUMPHREY.