United States Patent [19]

Reid

[11] **3,758,748**

[45] **Sept. 11, 1973**

[54] **SYSTEM FOR REMOVING SNOW AND ICE FROM PAVED SURFACES**

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[22] Filed: **Jan. 7, 1972**

[21] Appl. No.: **216,209**

[52] **U.S. Cl.** **219/213,** 165/45, 165/56, 165/108, 219/365, 219/369

[51] **Int. Cl.** **H05b 1/00**

[58] **Field of Search** 219/217, 365, 367, 219/369–371, 375; 237/69; 34/237; 165/108, 181, 45, 53, 56

[56] **References Cited**

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[57] **ABSTRACT**

A closed two pipe underground system having closed end caps and side openings is disposed below the paved surface. Heated air is circulated through the system and flows between openings to heat the surface to melt snow and ice.

8 Claims, 3 Drawing Figures

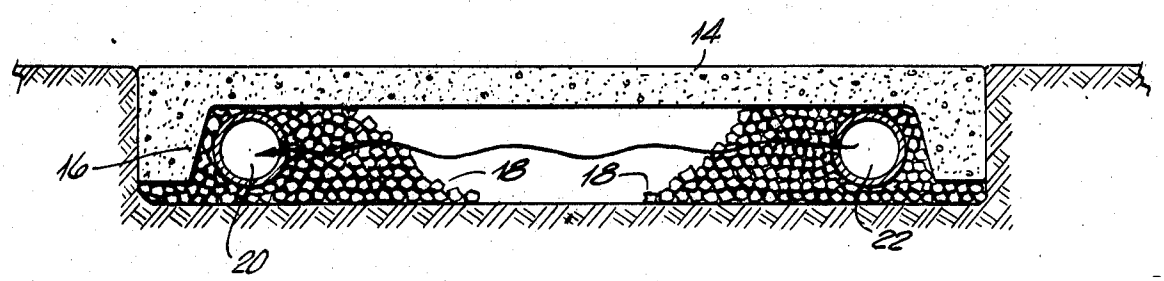
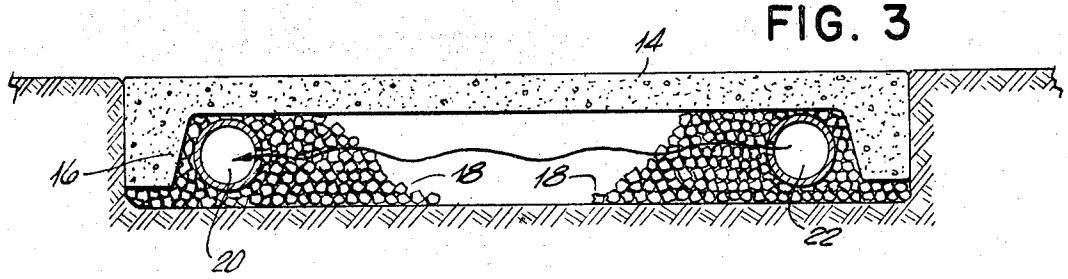


FIG. 3



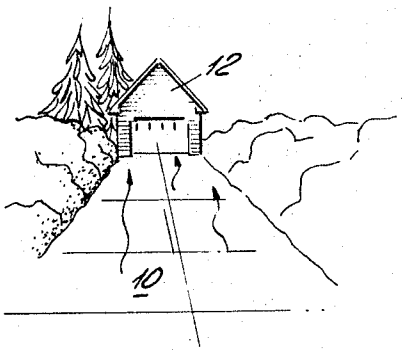


FIG. 2

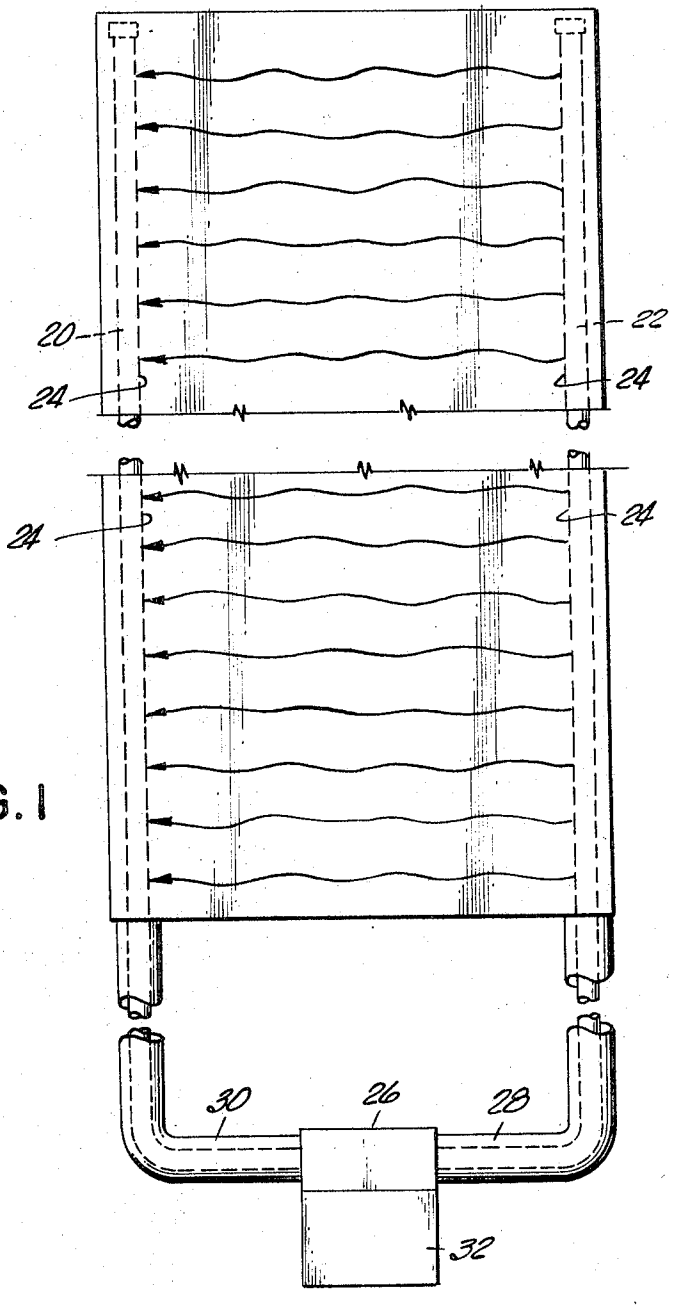


FIG. 1

SYSTEM FOR REMOVING SNOW AND ICE FROM PAVED SURFACES

FIELD OF THE INVENTION

My invention is directed toward a system for removing snow and ice from paved surfaces by heating same until the snow and ice is completely melted.

SUMMARY

To this end, crushed rock is disposed beneath the surface. Buried in the rock are first and second spaced parallel hollow pipes with side openings facing each other. A heat source provides heated air to a blower device. The suction end of the device is connected to one end of one pipe. The discharge end is connected to one end of the other pipe. The opposite ends of both pipes are sealed.

The heated air thus circulates within and between the pipes and heats the paved surfaces to a temperature at which any snow or ice thereon is completely melted.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a plan of my invention;

FIG. 2 is a perspective showing my invention in use; and

FIG. 3 is a cross section of the structure of FIG. 1.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

Referring now to FIGS. 1–3, the paved driveway **10** of garage **32** is to be kept clear of snow and ice by means of my invention. To this end, disposed below the top surface **14** of asphalt or the like is a recess **16** filled with crushed rock **18**.

First and second parallel horizontal lengths of pipe are buried in the rock, length **20** being designated as a return pipe and length **22** being designated as a supply pipe. These pipes are aligned with opposite longitudinal sides of the driveway. The pipes have spaced slots or openings **24** in the walls which face each other.

One end of pipe **20** is connected to the suction side **30** of blower **26**. A corresponding end of pipe **22** is connected to the discharge or pressure side **28** of blower **26**. The opposite ends of pipes **20** and **22** are sealed.

In use blower **26** forces air through pipe **22** and out of the slots. The air then passes through the spaces between the pieces of crushed rock into the slots of pipe **20** and flows back to the blower.

Heat source **32**, which can be gas or oil fired or even electrically powered, heats the air, in the blower. The heated air then heats the paved surface to melt snow and/or ice as previously described.

While I have described my invention with particular reference to the drawings, such is not to be considered as limiting its actual scope.

Having thus described this invention, what is asserted as new is:

1. Apparatus for heating a paved surface to melt snow or frozen material thereon, said surface having a recess below the top thereof, pieces of material supporting said surface interspersed in said recess whereby air may circulate between said pieces, two perforated conduits extending amongst said pieces, and being laterally spaced from each other, a blower having a discharge opening communicating with one said conduit and having an intake opening communicating with the other said conduit, and heating means adjacent to and adapted to provide heat to said blower.

2. Apparatus as of claim **1**, said pieces of material being crushed rock.

3. Apparatus as of claim **1**, said conduits being circumferentially surrounded by said pieces of material.

4. Apparatus as of claim **1**, said conduits being laterally opposite each other.

5. Apparatus as of claim **4**, said conduits being of substantially equal length.

6. Apparatus as of claim **1**, said conduits being closed at their outside ends.

7. Apparatus as of claim **1**, said perforations in each of said conduits being at an inner side thereof, whereby air from one said conduit is directed towards the said perforations in the other said conduit.

8. Apparatus as of claim **5** in combination with a driveway formed of said paved surface, said conduits being located adjacent the side extremities of said driveway.

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