

Current U. S. Patents

A huge underground incinerator has a movable chimney above ground which diverts the smoke back down and reburns it to eliminate all odor—By William McCann

► A GIANT UNDERGROUND incinerator for cities and town has a movable chimney above ground that reburns all the smoke to keep the air smelling fresh and clean.

The incinerator consists of a line of "pits" or receptacles that hold some 25 tons of refuse each. The bigger the city or town, the more pits the incinerator can contain. The chimney, the only part of the system that is above ground, sits on a track, which extends from pit to pit.

When refuse is to be burned in a pit, the chimney moves over it by remote control and the furnace goes on. The chimney contains a special smoke-burning device that diverts the smoke back down the chimney and reburns it to eliminate all odor.

Harold Siagel, a restaurant owner from Granby, Mass., was awarded patent 3,199,475 for the incinerator. Patent rights were assigned to American Capital Corporation, Brookline, Mass.

John McCullough, president of American Capital, told SCIENCE SERVICE that a pilot plant will soon be set up. This system will be very inexpensive compared with the above-ground incinerators that many cities and towns now use, he said. In addition, it will keep the air smelling much better.

Portable Oxygen 'Tent'

A newly patented portable oxygen "tent" lets a patient get some exercise while he recovers.

The portable unit is part of a two-in-one oxygen therapy system that earned patent 3,199,303 for two Union Carbide Corporation researchers, Wilfried Haumann and Charles P. Mulcahey, Indianapolis, Ind. The system consists of a large liquid oxygen storage unit and the smaller portable unit. The storage unit can be used when the patient is in bed or for filling the portable one.

In most cases a patient, especially an emphysema patient, cannot improve unless he gets some exercise, Mr. Mulcahey said.

And he cannot exercise without oxygen. The small unit, which weighs less than seven pounds and can be worn on the shoulder, can help a patient recover at home.

The system has already been successfully hospital tested in a number of selected areas, Mr. Mulcahey said, but it is still quite new.

Patent rights were assigned to Union Carbide Corporation, Indianapolis.

Other Interesting Patents

Dr. Rafael L. Bowen, Bethesda, Md., researcher with the National Bureau of Standards, earned patent 3,200,142 for a chemical compound called a surface-active comono-

mer that binds a plastic filling to a tooth. Patent rights were assigned to the Government through the Department of Health, Education and Welfare.

Chester F. Carlson, Pittsford, N.Y., inventor of xerography some 27 years ago, was awarded a patent for a xerographic fusing and drying apparatus. The device earned patent 3,199,223 and rights were assigned to Xerox Corporation, Rochester, N.Y.

Jacob Rabinow, Rockville, Md., pioneer in making automated Post Office machines, was awarded a patent for a machine that reads handwriting. The optical handwriting reader earned patent 3,200,373 and rights were assigned to Control Data Corporation, Minneapolis, Minn.

• Science News Letter, 88:141 August 28, 1965

Do You Know?

Giraffes do have vocal cords, contrary to a popular myth, and can make noises but seldom do.

There is no sign that the turbulence caused by an outboard motor disrupts either the mating or nesting of *fish*.

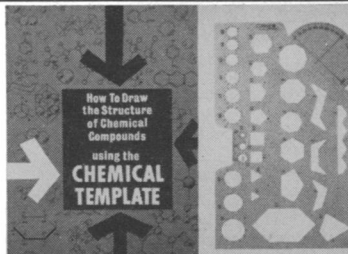
In 1908, a cluster of small *meteorite stones* leveled a Siberian forest.

• Science News Letter, 88:141 August 28, 1965

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