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## LETTERS

# to the editor

### Air pollution

Sir:

Your article on auto pollution (SN: 11/4) says that carbon monoxide levels in New York approach the lethal point. As a New Yorker I can well believe it. The U.S.A. is being gassed.

Two possible remedies: The first admittedly stop-gap, but practical and cheap, and it could be added to existing cars with little trouble. It is to add a pipe to tailpipes that would carry the exhaust to a height of about eight feet before it is released—in the style of many trucks today. The hot gases would rise above the breathing height of everyone on the ground, with the result that the first eight feet of our air would have relatively little concentration of CO and other gases from cars.

The second is long-range: Every chemistry class demonstrates that water can be split into its component hydrogen and oxygen by an electric current, and that these gases can be exploded back into water. The possibility of a water-fuel car thus presents itself—a car without any fumes at all. Though probably difficult, such an invention as a water-fuel engine may well be within the capabilities of today's technology. (I have heard—whether reliably or not I don't know—that such an engine existed in the 1930s and was quietly shelved for fear of economic problems arising from its use. Today economic adaptation would be much easier.)

Let's hope that legislators might (immediately!) take up the first suggestion, and inventors the second.

Edward Lindemann  
New York

# films OF THE WEEK

Listing for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

**FUNDAMENTALS OF AC AND DC GENERATION.** 16mm, color, sound, 20 min. Presents fundamental concepts in the generation of electricity, reviewing the principle of electromagnetic induction and demonstrating Fleming's right-hand rule to determine voltage and current direction in electric circuits. Audience: schools and industrial training courses. Purchase \$170 from General Electric Educational Films, 60 Washington Ave., Schenectady, N.Y. 12305.

**LOCUSTS.** 16mm, color, French sound track, 14 min. Main phases in the life cycle of the insect: hatching of the larvae, moulting, feeding, mating and egg-laying. Audience: high school and college biology. Free loan but \$3.00 for handling and postage, from Society for French American Cultural Service and Educational Aid, 972 Fifth Ave., New York, N.Y. 10021.

The following films use variations on candle burning in a closed system to raise questions regarding a common fallacy: that a burning candle in a closed container consumes all the available oxygen. Films are available in either standard 8mm loop or super 8mm loop, color, silent, and can be obtained at the prices indicated from Modern Learning Aids, 1212 Sixth Avenue, New York, N.Y. 10036.

**CANDLE BURNING TECHNIQUES.** 3½ min. The heating effect of the candle is the underlying theme of all the experiments. One end of a tube is closed with different materials and the other end plunged over the candle at different rates. Standard 8mm loop, \$13.00, and super 8mm loop, \$14.50.

**CANDLE BURNING: I.** 3½ min. Close-up and slow-motion photography are used to show the experiment in greater detail. A candle is held by a piece of clay in a tray of water. After the candle is lit, a plastic tube is inverted over the burning candle. Experiment repeated with variations. Standard 8mm loop, \$13.00, and super 8mm loop, \$14.50.

**CANDLE BURNING: II.** 3½ min. Two experiments allow the observer to estimate the amount of air that expands out of a tube when it is plunged over a burning candle. Helps explain why water rises in a tube that has been inverted over a burning candle. Standard 8mm loop, \$13.00, and super 8mm loop, \$14.50.

**THE MOUSE AND THE CANDLE.** 3½ min. Two mice are placed in a gallon jar, and a burning candle is placed in the jar with the lid screwed on tightly. Behavior of mice is shown before, during, and after the candle is burned to invite six questions about the nature of the "air" left in the jar after the candle goes out. Standard 8mm loop, \$13.00, and super 8mm loop, \$14.50.

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