

of charge by schools, technical colleges, scientific societies and other educational organizations. Both 35 mm. and 16 mm. sound and silent films are available. Synopses of these films giving an indication of the main themes dealt with are to be found in a catalogue recently issued by the Bureau. The films fall into three main sections, dealing with the varied aspects of oil production and drilling, some of the uses to which oil is put, and its particular adaptation to the requirements of the modern petrol engine, respectively. In the production and drilling section, there is one more or less general film giving an indication of how oilfields are discovered and wells drilled, which countries produce oil and how it is transported in tankers across the seas. This is followed by others having a more local bias. The work of James Young on the production of oil from shale and the subsequent establishment of the Scottish shale industry is only one of several themes which lend themselves admirably to pictorial development. Illustrations of the uses of oil are as diversified as they are manifold. They embrace fishing for swordfish, re-fuelling an Imperial Airways liner at Kisumu and spraying trees to destroy insects, to cite only a few examples. The films depicting first principles of internal combustion and compression ignition engines and the theory and practice of their lubrication are of necessity less spectacular in their conception. Nevertheless the diagrams and models will prove of great assistance to those seeking lucid explanations of technical details.

### Antiquity

IN the December issue of *Antiquity*, the editor discusses in the frankest terms the future and the policy of that publication in relation to present conditions in international relations and world affairs. After the most careful survey of all possibilities and probabilities, it has been decided "to take courage, and at any rate plan for the year 1940". In arriving at this decision notwithstanding the difficulties which arise both from the almost complete cessation of all archaeological activities on the outbreak of war, and from the absence on active service of many of its contributors and subscribers, the editor's decision has been determined largely by the view that the periodical for which he has been responsible both in and since its inception represents an essential contribution to learning and progress to which, so far as is humanly possible, there should be no interruption. In this opinion he is fortified by expressions of opinion from his supporters, of whom one writes that it is "of paramount importance that all *foci* of Culture and Learning should be kept alive" during the present troubles. While endorsing in the strongest terms this formula of one, at least, of the functions of publications of the class to which *Antiquity* belongs, we would also second the more readily the editor's appeal for continuance of that support from the public which has helped him to win for this publication the position which it holds in cultural studies to-day.

### An Early Gas Mask

ATTENTION is directed in the *Journal of the Royal Society of Arts* (Nov. 3, p. 1239) to a description of a mask which appeared in vol. 43 of the Society's *Transactions* (1825). It was designed by John Roberts, of St. Helens, Lancashire, "to enable persons to breathe in thick smoke or in air loaded with suffocating vapours", and was effective against smoke and also against a gas such as sulphurous acid. It consisted of a leather hood with two apertures filled with glass or mica to see through. The hood descended to the bottom of the neck, was well wadded at the bottom, so as to be rendered airtight, or nearly so, when secured by the straps attached. From the nose a flexible leather pipe is attached, terminating at the bottom in a trumpet-shaped piece of japanned tinfoil, the open end of which is plugged with a moist sponge kept in place by a piece of coarse cloth. Breathing is carried on through the tube, and any particles in the air or vapours or gases in any considerable degree absorbable by water are removed by the cloth filter and the moist sponge. An illustration shows a very workman-like piece of apparatus. Details are given of various tests that were made with it.

### Alcoholism and Suicide

DR. MERRILL MOORE (*New England J. Med.*, 221, 691; 1939) discusses the relation between alcohol and suicide in a paper based on the study of 143 alcoholic patients, admitted to the Boston City Hospital during the period 1915-38, who had attempted suicide, out of a total of 1,195 admitted during the same period after attempting suicide; 98 were men and 45 women. The great majority were between the ages of thirty and forty. Conditions of occupational, marital or economic maladjustment were present in all. By far the greatest number were unemployed or of unknown employment, and few skilled workers were included. As regards motivation the reasons offered for the attempted suicide were occupational maladjustment, domestic friction, depression and anxiety. Poison by mouth, especially iodine, the ineffectiveness of which was probably not realized, was the most popular method of suicidal attempt. Inhalation of illuminating gas came next, while less frequent methods were slashing, jumping from high places, hanging, immersion and firearms. 136 (95 per cent) were unsuccessful in their attempt and only 7 (5 per cent) died after admission to hospital, as compared with 11 per cent of the total number of suicidal patients admitted. Dr. Moore attributes the large number of failures in suicidal attempts among the alcoholic patients partly to the ingestion of non-poisonous substances or sub-lethal doses, and partly to the tendency of the alcohol to render the method of suicidal attempt less efficient.

### Social and Technical Aspects of Housing

THE methods employed in Belgium, the United Kingdom, Denmark, Finland, France, the Netherlands, Norway and Sweden for improving urban and

rural housing conditions, and in the United States of America and Canada for urban housing, are reviewed in a study entitled "Urban and Rural Housing" conducted by M. B. Helger, of the Swedish Social Board, which has been published by the Economic Intelligence Service of the League of Nations (Geneva: League of Nations. London: George Allen and Unwin, Ltd. 3s. 6d.). The study has special reference to the cost involved and the results obtained, mainly in the housing problems raised after the War of 1914-18, and the attempts at solving those problems up to the outbreak of hostilities in 1939. Separate chapters are devoted to each country, and figures are given showing the need for additional accommodation, the lack of modern conveniences in existing dwellings, and the number of existing dwellings which should be repaired, or demolished as unfit for further use. General aspects of the housing problem are discussed in an introductory chapter in which the two aspects—social and technical—of the problem are distinguished.

In regard to the social aspects, the causes of fluctuation in building activity and their bearing on the periodic shortage of houses are examined. The technical aspects are concerned with the quality of housing and are better treated separately because the ideas of public authorities as to minimum standards appear to make it impossible to solve the housing problem merely by the operation of supply and demand. This is partly because the income of many families is inadequate to enable them to obtain housing with the minimum conditions of health and comfort, and partly because many families fail to appreciate the importance of these conditions and make no effort to obtain suitable housing even when they can afford to pay the rent for it.

#### Economizing on House Fuel

According to *Science Abstracts* of November 4, E. S. Draper, director of the regional planning studies, reported at a meeting of the Committee on the Hygiene of Housing of the American Public Health Association, that by using adequate insulation against heat loss when building a small house, the cost of the fuel required can be reduced by nearly one half. A simple heater suitable for the central heating of small houses was developed after tests at the Gilbertsville Dam construction community and is now being placed in the open market. The insulation studies were carried out in two identical four-roomed houses in the Niwasse Dam construction community. The installation of electrical heaters made it possible to record with great accuracy the heat loss in the two houses. One of them was insulated throughout by wool bats in the walls and over the ceiling and an insulation board under the floor joists. Both houses had both doors weather-stripped. Both families obeyed the same schedule of window-opening in bedrooms at night, windows closed by day, and the heaters were turned on and off at the same times. The reduction in the total heat loss in the insulated house was 44.75 per cent. The cost of the insulation, including labour and materials, was about £40.

The simple heater described by Mr. Draper was designed to effect a reduction in the capital cost of central warm air heating over that of installing the warm air furnaces available in the market. The object was to have a primary heat source (without provision for air filtering or humidification) placed in an exceptionally small first floor heating chamber centrally located, so that it might give service to all rooms of a small house without the usual extensive system and basement.

#### Accessibility of University Theses

"The Accessibility of British University Thesis Literature", a pamphlet prepared for the Nottingham meeting of librarians last September by Colonel Luxmoore Newcombe, principal executive officer of the National Central Library, is a full and careful survey. A thesis usually contains original matter which may be important for the advancement of the subject, and the range of special studies has been enlarged of late. It should be easily consulted, if only that the work may not be duplicated by some other specialist. This accessibility, the writer shows, is far from being satisfactorily arranged at present. He gives a list of all the theses for degrees at British universities, and the conditions under which they can be consulted. He includes also the collections of foreign theses available. Oxford received between 1885 and 1938 about 263,000 of these. Great Britain has no great guides to her published and unpublished theses such as exist in Germany, France and the United States.

THE French issue annually a volume containing on an average 2,150 entries, well indexed. The American catalogue of "Doctoral Dissertations" during 1937-38 includes 2,768 items, but here the degree sought is so common among teachers that good subjects are getting rare, and descriptive rather than original stuff finds a place. The library of the University of Aberdeen has no printed list after 1937. Edinburgh has published an annual list since 1931, but it cannot be purchased. In London an annual list of titles is published and a cumulative catalogue is to be made out of it every five years. Medieval studies and history are fortunate in special catalogues. Only six universities have both an author and a subject index. A national guide to all British theses should be made, and its natural place would be the Central Library. It should be possible for friends of research such as the Carnegie Corporation to back the scheme with adequate funds. Colonel Newcombe also suggests that the Library might have a copy of every foreign thesis on loan. The photostat seems a suitable means of increasing the supply of duplicates at the various universities.

#### Astronomy in Ancient Egypt

THE traditional view that the knowledge of astronomy of the Greece of classical times had been derived from Egypt, a view to which the writings of the Greeks themselves lent support, has lost favour with increased acquaintance with the achievement