was said to do this for the sake of getting at the fat covering the kidneys, but this, obviously, is a statement founded on insufficient knowledge of what this implies. The damage done, as evidence has shown, was grossly exaggerated, and, when inflicted, was due to hunger. It was shown that keas could, and did, exist in numbers, without doing damage in areas where the food supply was constant, although in and around sheep-farms. But be this as it may, the fear and dislike which its presence has engendered, threatens its existence. Hence it is to be hoped the experiment of the Zoological Society will be successful.

Alcohol-Petrol as a Motor Fuel

IN connexion with the leading article in NATURE of March 11 on the subject of power alcohol, it is of interest to find that an alcohol-petrol mixture has begun to be distributed in Great Britain from garages over a wide and extending area under the name of "Koolmotor Alcohol Blend" at the same price per gallon as No. 1 Petrol. A mixture of alcohol in petrol has been in common use in racing cars for a year or two, but now the ordinary public will have for the first time an opportunity of testing its merits, in particular the absence of knocking. The anti-knock value is said to be equivalent to approximately 85 octane number. An alcohol of 99·9 per cent purity produced in England is being used. It is probable that the use of a fuel of this type in England, with the opportunity it will give for general experimenting, will have an effect on engine design. As the result of motor racing, which has as its real object the improvement of design and not the establishing of speed records, engines of high compression ratios have been introduced which need special fuels if they are to be used to advantage.

A BLEND of alcohol with ordinary petrol has now been prescribed by law in Czechoslovakia. Science Service of Washington, D.C., gives details of the spirit, 20 per cent alcohol and 80 per cent petrol, which the Government has apparently instigated in order to give a boost to the potato industry. Potato starch yields the desired grade of alcohol by hydrolysis and fermentation and all motor fuel is, apparently, to be treated with the specified percentage of alcohol before retail sale. There is, further, one technical matter which seems to have been solved in this connexion. Alcohol, as produced by economical distillation methods, usually carries with it 4–6 per cent water, which makes it impossible to mix directly with straight-run petrol, particularly of the paraffin base type. Recent research has resulted in a new distillation process, economical on a large scale, which permits dry or 'absolute' alcohol to be made with the aid of benzene. This product is now available under the new Czechoslovakian edict. The somewhat curious corollary to all this is that ordinary petrol will now go on the restricted list in that country, like ethyl and methyl alcohol in Great Britain, and, presumably, only chemists, research laboratories and the like will be able to receive permits to purchase pure petrol.

Darwin's Barometer

THE British Association has recently received on loan from the Royal Society the barometer used by Charles Darwin during the voyage of the *Beagle*, and it is now exhibited among the other relics of Darwin in Down House, his home in Kent, now in the custody of the Association. The barometer, made originally by the firm of Newton, has been restored by Messrs. Negretti and Zambra with the advice of the Meteorological Office, the scales have been re-engraved, and it is now in working order as Darwin had it. The instrument is of the straight type, contained in a wooden case three feet long, with a thermometer near the base. The barometer scale reads down to 18·2 in., so it was suitable for use up to fairly high altitudes, and Darwin is known to have carried it when ashore during the voyage. A double mercury cistern and locking arrangement is provided to allow of carrying the instrument without disturbance.

British Polar Year Expedition

THE National Polar Year Committee has received a report dated December 31, 1932 from Mr. J. M. Stagg, leader of the British expedition at Fort Rae in Canada. From this it appears that the party had its first taste of winter conditions on October 1, when the first snow fell and the rain recorder was permanently frozen up. The temperature at the date of the report was about −40° F. Difficulties have also been experienced with the clocks. Special low temperature clocks proved useless out of doors, but the party found that by removing all the oil from ordinary clocks, they functioned satisfactorily. The recording pen of the anemograph has also proved troublesome. Sounding balloons have been sent up but none had been recovered, though a cabled message has since reported the recovery of two meteorographs with good records. Communication with the sub-station for auroral photography about twenty miles south-east of Fort Rae was by wireless, but with the onset of winter, a telephone line was taken across the frozen Great Slave Lake. Auroral activity has been poor though some form of aurora can be observed more or less continuously from dusk until dawn. Some four hundred photographs have been taken, using the double station communication to obtain simultaneous exposures at Fort Rae and the sub-station twenty miles distant. The moon is only below the horizon for a short time daily, and during full moon auroral photography becomes almost impracticable. The sub-station is manned by one member of the expedition for a week at a time. The expedition's schedule includes full meteorological records every three hours, hourly cloud observations, and observations of aurora every five minutes and continuously when photography is being done.

Recent Acquisitions of the British Museum (Natural History)

ADDITIONS to the study series of mammals in the Zoological Department of the Museum include the skins of a male and female golden cat (*Profelis aurata*) from the Cameroons, presented by Mr. F. W. Carpenter. The specimens illustrate the two colour

phases found in this species, one skin being buff and the other grey. A similar dimorphism exists in the bay cat of Asia, and at one time the buff-coloured specimens were thought to represent a species distinct from the grey ones. The Department of Entomology has received during the past twelve months a further 7,773 insects collected and presented by Mr. Rowland Turner, from South Africa. Most of these are small and little-known wasps, and the proportion new to science is extremely high. The Department of Mineralogy has acquired by exchange fragments of a meteoric stone which fell on August 27, 1931, near Yukan in eastern Kiangsi, China. Although the fall of stones from the sky has been mentioned in Chinese literature since 1808 B.C., none appears to have been preserved with the exception of three stones that have been described scientifically since 1923.

Botanical Acquisitions at the Natural History Museum

HIS MAJESTY THE KING has placed on loan a further collection of Nepal plants presented to him by His Highness the Maharaja of Nepal. The collection contains 182 specimens and was made in central Nepal by Prof. K. N. Sharma. The plants are excellently preserved, and include a fine series of *Primula*, *Gentiana* and *Mecanopsis*. Seeds of most of the plants have been sent for growing in the Royal Parks and Gardens. The British herbarium of the late Mr. Percy Moring has been presented by his widow. Mr. Moring was resident for some time at Dover and the herbarium is rich in plants of the neighbourhood. It also contains the specimens collected round Hampstead during the Hampstead Regional Survey. Many specimens from the London suburbs are valuable records of habitats now lost through building. The Department has purchased Part I of a copy of an edition of Philip Miller's "Figures of Plants described in the Gardener's Dictionary", published in 1798. So far, nothing is known further about this edition. The thirty plates are printed in various colours and are also coloured; the dates have been erased from the blocks and the Linnean system of naming has been adopted.

A British Film Institute

THE joint committee of the Commission on Educational and Cultural Films and the bodies representing the film trade has now reached agreement on a scheme for the setting up of a British Film Institute. The general purpose of this Institute will be to encourage the use and development of the cinematograph as a means of entertainment and instruction. Among its specific objects will be to advise educational institutions and other organisations and persons as to sources and conditions of supply, types of films and apparatus; to promote and undertake research into the various uses of the film and of allied visual and auditory apparatus; and to maintain a national repository of films of permanent value. The Institute will have a membership based on subscription, and its government will be vested in a council representative in equal proportions of the film trade, educational interests and the general public. The membership of the governing council has not yet been completed, but it includes Sir Charles Cleland, Mr. A. C. Cameron and Mr. R. S. Lambert as representing the Commission on Educational and Cultural Films and Mr. Thomas Ormiston, M.P., Mr. C. M. Woolf and Mr. S. Eckman, as representing the film trade

Underground Lighting in Mines

THE paper on "Underground Lighting in Mines" read to the South Wales Branch of the Association of Mining Engineers by R. H. Campin and published in the *Mining Electrical Engineer* for February is a helpful and useful paper. Special stress is laid on the importance of miners' hand lamps. Mr. Campin points out that most of the hand lamps now in use are virtually of the same type as those developed before 1915. There are approximately 750 thousand hand-lamps in use in Great Britain. About fifty per cent of them are flame safety lamps. The popularity of the flame type is probably due to the fact that it automatically indicates the presence of inflammable gas. Most of the electric lamps in use are of a somewhat antiquated type giving only one candle power and supplied by a two volt battery in a celluloid case. The number of lamps supplied by alkaline batteries is about four per cent. There is no doubt that in many cases improved lighting would considerably increase the output as well as diminish the total number of accidents per annum on which compensation has at present to be paid. The author mentions the case of a German mine where the effect of doubling the illumination was to increase the output per man-shift by about 30 per cent. Doubling the light increased the cost of the lighting from a half-penny to a penny per ton of coal raised. Medical investigations have shown that nystagmus is practically a light deficiency disease. The collieries have to spend £440,000 annually in compensation to sufferers from it. If lights of not less than four candle power were used, the number of cases would be greatly diminished. The author thinks that the illumination of many of our collieries could be tripled or even quadrupled without increasing operating charges. Flood-lighting at localised spots is recommended.

Prehistoric Society of East Anglia

THE contents of the recent issue of the *Proceedings of the Prehistoric Society of East Anglia* (vol. 7, pt. 1) are of exceptional interest. At the head is the presidential address in which Mr. J. Reid Moir surveys the evidence for the culture of Pliocene man which has been collected in the last twenty-five years. This is followed by a description by Mr. J. P. T. Burchell of hand-axes from the north of Ireland, upon which Mr. Reid Moir reports that a certain number are undoubtedly of high antiquity, ranging from eolithic to Clactonian I. Lieut. K. R. W. Todd enumerates stone age sites, mostly palæolithic, from which he has obtained a considerable number of implements, in the neighbourhood of Bombay; and Prof. A. Barnes discusses the mode of prehension of some forms of upper palæolithic implements. The important work