

important extension to this building, which completes the scheme, was formally opened on March 16 by Mr. W. D. Woolley, chairman of the Monmouthshire and South Wales Coalowners' Association. The new accommodation provides: ground floor, mechanical laboratory, physical laboratory and lecture room; first floor, three research laboratories, private room, museum and library; second floor, chemical laboratory, balance room, combustion and gas analysis, laboratory and private room. The College has now a well-planned and well-equipped building for teaching and research work, the erection of which is due to the generosity of the Monmouthshire and South Wales Coalowners' Association.

#### Projected Flight over Everest

IN our issue of February 4 (p. 160), reference was made to the two aeroplanes which have been modified to undertake a flight over Mount Everest. According to the Karachi correspondent of the *Times*, the machines arrived at Karachi on March 9. The main base for the expedition will be Purnea. The photographic results of the flight, should it be successful, are likely to be of considerable interest, for nothing is known at present of the south face of Everest. Indeed, if the photographs are available in time, they may be of assistance to the expedition now in India preparing to climb the mountain (*NATURE*, Jan. 7, p. 10), especially if the snow and ice conditions have changed considerably since the 1924 expedition. Useful data may also be obtained of atmospheric conditions; while we know a good deal about the atmosphere at 30,000 ft. above mean sea level, it is likely that conditions at this absolute height but with high mountains below will be different. The aeroplanes, however, are not suited for making useful cosmic ray observations. The flight will be a great adventure, for should the machines have to come down through engine failure, the chances of finding a suitable landing place in that great area of mountainous country are small.

#### Discovery of Sexuality in Plants

THE discovery of sex in plants is usually credited to Camerarius (1694), and Koelreuter (1761) is generally believed to have made the first systematic study of plant hybrids. Statements of Sachs in his "History of Botany" are mainly responsible for these attributions. Dr. Conway Zirkle is able to show, however (*J. Hered.*, vol. 23, No. 11), that other names really have priority in connexion with these important developments in the history of science. N. Grew, in an address to the Royal Society in 1676, expressed the view that the stamens are the male organs of a flower, the pollen acting as vegetable sperm. Thomas Fairchild, whom Sachs referred to as "a gardener in London", was in fact the leading experimenter of his generation, and his famous cross between sweet william and the carnation is shown to have been made at least as early as 1717. Philip Miller was the first to describe insect pollination by observations on tulips. This was not, however, in 1751, as stated by Sachs, but so early as 1721. He

also observed natural crossing in cabbages as well as sexual reproduction in cucumbers and melons. Dr. Zirkle also gives an interesting account of equally early American observations on pollination and crossing, chiefly in maize, by Cotton Mather (1716), Judge Dudley (1724) and Governor Logan (1735). A letter of John Bartram in 1739 shows that he too had made species crosses in *Lychnis* at that date.

#### Courtship of Birds

THE courtship displays of birds, wherein they manifest the amorous emotions which possess them, are now daily becoming more and more assertive. Much has yet to be learned concerning the 'behaviour' of birds thus possessed at this time; and the relation of this behaviour to various and often conspicuously coloured plumage, wattles, bare skin, or inflatable air-sacs. The pheasants afford striking illustrations of apparently conscious effort to display such ornaments to the best advantage before apparently disinterested females. The belief that these displays serve as aphrodisiacs must be regarded as well-founded. This fascinating aspect of bird life can now be studied at the Zoological Gardens, Regent's Park; a number of tragopans, or horned-pheasants, as well as Cheer, Impeyan, and Kalij-pheasants, having just been added to the collections. Blyth's tragopan from Assam, and the crimson tragopan from the south-eastern Himalayas, each bears an erectile appendage over the eye, of a vivid blue colour; and an inflatable wattle at the throat. In Blyth's tragopan this is yellow tinged with blue, while in the crimson tragopan it is orange, barred with blue, and when filled with air presents a strange effect. If the courting antics of the tragopans be compared with those of the golden and Amherst pheasants, wherein the chief ornaments take the form of a great frill of vividly coloured feathers encircling the neck, the contention that both types display deliberate and purposeful movements designed to make the most effective possible use of these ornaments will seem incontrovertible. Though the Darwinian view that these resplendent areas were brought to perfection by the selective preferences of the female, before whom they are displayed, has lost its hold, they are nevertheless instances of 'sexual selection'; since only the most amorous males, the most skilled performers, can succeed in arousing the desired response in their phlegmatic prospective mates.

#### Vanished Races in South Africa

FROM time to time news is received of the discovery in South Africa of a new and previously unknown culture, presumed to be the work of a vanished race. More often than not the finds are associated with stone-work or the evidence of metal-working. The latest discovery to be reported (*Times*, March 13) comes from the northern Transvaal, where Mr. D. S. van der Merwe, assistant registrar of mining titles on the Rand, has discovered sacrificial graves of an entirely new type, a sacrificial altar, approached by ceremonial causeways and by staircases, an