

exemplify the idea and to let schoolboys know how the daily arithmetic of the laboratory and of the workshop is carried out. Masters should also find them useful for curve tracing on squared paper, as the coordinates of any parabola or rectangular hyperbola, or of any curve representing the law of inverse squares, can be read off from the rule with a single setting of the slide.

With such inexpensive slide-rules it is to be hoped that the makers will in time provide two spare slides at a slight additional cost. For instance, one should be divided so as to give sines and tangents; the second should have a scale of equal parts to give logarithms and a log log or P line for exponential calculations. They might also with advantage print on the back of the rule constants that are frequently required, but at no extra cost.

With such extra slides the master would be able to illustrate further curve tracing, and the line of sines would be specially useful in the optical class for reading off angles of incidence and of refraction with any refractive index, or for showing the necessity of total internal reflection when the scale of sines stops short of the number representing the refractive index. He would also find it useful in solving triangles.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—Dr. G. H. F. Nuttall, F.R.S., Quick professor of biology and fellow of Christ's College, Cambridge, has been elected to a professorial fellowship at Magdalene College.

MANCHESTER.—By the will of Mr. G. Harrison, who died on January 21, 1900, is bequeathed to Owens College for scholarships or fellowships, or such similar purposes as the council of the college may direct, subject to the words "George Harrison" being always associated with the objects provided for by this bequest.

SIR FREDERICK WILLS has contributed another 500*l.* to the fund for establishing a university at Bristol. This brings his contribution up to 10,000*l.* At the beginning of this year Mr. H. O. Wills promised 100,000*l.* toward the endowment of the university provided a charter be granted within two years.

THE University of London Union Society appears to have made good progress since its formation in July, 1906. The annual report for 1906-7 shows that at the end of the session there were 377 members, 180 of whom were graduates. Monthly meetings for discussion were held during the Lent and Easter terms of 1907, and, in addition, friendly relations have been established with the Students' Representative Council, the University Athletic Union, and the University Musical Society. The new union is modelled on the lines of those existing at Oxford and Cambridge, and deserves the support especially of the students of London colleges affiliated to the University. Interested members should apply to the secretary, Mr. D. W. H. Bell, 20 Maxey Road, Plumstead.

A BILL to establish compulsory continuation schools in England and Wales, and to amend the Education Acts of 1870 and 1902 in respect of the age of compulsory school attendance, was introduced in the House of Commons on Tuesday by Mr. Chiozza-Money, and read a first time. In introducing the Bill, Mr. Chiozza-Money said that according to the last census there were in England and Wales 5,000,000 youths of both sexes between the ages of fifteen and twenty-one, and of these not more than 400,000 were receiving any measure of systematic training. This does not include the children of the upper and middle classes, but if 400,000 be added the extraordinary conclusion is arrived at that out of 5,000,000 young people between fifteen and twenty-one years of age only 800,000 continue training after leaving the elementary schools. The practical result is that untrained boys and girls drift into the ranks of the incompetent, the unskilled, and the unemployed. The Bill abolishes all partial or total exemptions of boys and girls under fourteen years of age. It abolishes half-timers, making fourteen years the lowest age at which a boy or girl might leave an elementary school. A continuation scholar is defined as a boy between

the ages of fourteen and seventeen, and a girl between the ages of fourteen and sixteen. The Bill makes it the duty of the education authority to establish continuation schools, with technical classes, and the attendance of continuation scholars is made compulsory on the parent and the employer. The hours of attendance would be six per week, spread over one, two, or three days. The cost of carrying out the provisions of the Bill would be defrayed out of money voted by Parliament.

ABOUT a year ago the Board of Education requested its Consultative Committee to consider and advise the Board what methods are desirable and possible, under existing legislation, for securing greater local interest in the administration of elementary education in administrative counties by some form of devolution or delegation of certain powers and duties of the local authority to district or other strictly local committees. The committee has reported to the Board, and the report has been published (Cd. 3952). A prefatory memorandum states that the findings of the committee are under the consideration of the Board, and that the report has been published to provide information in view of the discussion arising out of the Bill recently introduced in the House of Commons to secure compulsory devolution. The Consultative Committee has arrived at certain general conclusions which should prove of value in assisting intelligent action. Every education committee, it is suggested, should, so far as existing powers go, secure as managers of schools the services of persons familiar with the educational needs of the locality and likely to be regarded with confidence and sympathy by parents, teachers, and the education authority. At the same time, there are certain duties requiring a wide outlook and broad educational experience which, the committee thinks, should be reserved by the authority itself. A certain number of counties exist which might with advantage create some form of local subcommittees and delegate to them duties appropriate to their needs and circumstances. It is very important to notice that the Consultative Committee states that it would be difficult, if not impossible, to devise any uniform system which would give general satisfaction throughout the country. It would be fatal to efficiency if a parochial spirit became predominant in the administration of education. It is desirable by all means to encourage an interest in educational matters in all districts by every legitimate means, but every step must be taken to ensure that the supply of efficient education in every locality is a national matter which must not be left at the mercies of local prejudices.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, December 5, 1907.—"Localisation of Function in the Lemur's Brain." By Dr. F. W. Mott, F.R.S., and Prof. W. D. Halliburton, F.R.S.

The brain of the lemur, the lowest of the ape-like animals, does not appear to have been subjected previously to a thorough examination. Page May and Elliott Smith brought a brief communication on the subject before the Cambridge meeting of the British Association in 1904. Their experiments were apparently limited to stimulation of the cerebral cortex, and they have never published a full account of their work. Brodmann has worked out some of the histological details of the structure of the cortex cerebri, and Max Volsch has performed a stimulation experiment upon one lemur. The work of these investigators will be referred to again in the course of this paper.

(1) The brain of the lemur has a simple convolutional pattern, and the fissures are few and for the most part shallow.

(2) The motor areas are limited to the central region of the cortex.

(3) Extirpation of the excitable areas is followed by transitory paralysis of the corresponding regions on the opposite side of the body, and by degeneration of the tracts which pass to the bulbar or spinal grey matter which controls these movements. Degeneration also occurs in commissural (callosal) and association tracts in the cerebrum.