

the direction of improved social service. The activities of the Carnegie United Kingdom Trust, as set forth in the eleventh annual report, may be summarised as an attempt to restore to the English people the amenities of life which their forefathers enjoyed, and of which they were deprived by an over-rapid development of the factory system. The library policy of the Trust has, as is well known, been directed to the provision of facilities for reading in the rural districts by the establishment of County Library schemes reinforced by Central Loan Collections. Grants for the establishment of County Libraries have now been made in eighty-six counties in the United Kingdom of Great Britain and Ireland, and in the course of a few years these will all be on an independent basis. The development, however, of the Central Loan Collections on self-supporting lines presents many difficulties. The cost of the administration of these national book stores is likely to increase more rapidly than the income from the contributory libraries, and it is clear that in the long run some assistance will have to be provided by the State. In the meantime the grant to the London Central Library has been increased from 1000*l.* to 3000*l.*, at which sum it will be maintained for the next four years. Other activities of the Trust in the direction of fostering the national talent in musical composition, the drama, and folk-dancing continue to show satisfactory results. The Margaret Carnegie Hostel for girls at Portree was officially opened last October, and a large grant has been made for the purchase of a building in East London to be used as a hostel for boys.

VISUAL Education Departments in Educational Institutions form the subject of a report published in Bulletin, 1924, No. 8 of the United States Bureau of Education. Of 78 State universities and State colleges, 20 have departments sufficiently well organised to employ special officials to handle visual aids. They are generally organised as parts of the university extension divisions of these institutions, but the work is not entirely extra-mural, and the departmental heads attend faculty meetings. The growth of these departments is described as a teacher movement and not a commercial development: on the contrary, it is a development in despite of the commercial exchanges, which have sided with the theatres in their opposition to supplying films to educational institutions. Five departments undertake the actual production of films. Columbia University has a course in moving-picture production, and the University of Nebraska is said to have built a 20,000-dollar moving-picture studio on its campus. The University of Wisconsin has purchased the negatives of a large group of educational films, and sells the prints direct to other institutions at about 60 dollars per reel of 1000 feet—considerably less than what commercial firms charge. The United States Department of Agriculture and the Bureau of Mines have done much to popularise instruction in agriculture and in mining and metallurgy by the use of films and slides. The Bureau of Mines contrives to produce films without any expense to the Government beyond the salary of an engineer, who assists in planning and directing the work to assure its being worthy of circulation, the whole of the rest of the cost of production and making the copies being borne by the industries filmed. Colleges, high-schools, and churches are the largest users of these films. Though films figure largely in the report, they are by no means universally considered the most useful of visual aids. The slide has a decisive majority vote for usefulness. Much use is also made of stereographs and exhibits of objects from museums.

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### Early Science at Oxford.

**April 13, 1686.** A discourse concerning Hydraulic Engines, drawn up by Mr. King of Dublin, was communicated by Mr. Ash: the Society ordered their thanks for this ingenious discourse, both to Mr. Ash, and Mr. King.

Mr. Caswel communicated a Mathematicall paper containing the Solutions of severall problemes, composed by Mr. Baker of Bishops Nymton in Devonshire.

**April 14, 1685.** Mr. President communicated a farther discourse concerning ye Air's Gravity observed in ye Baroscope, occasioned by that of Dr. Garden read ye last meeting. He also communicated ye following observation; that at Dover, on March 19 last past, (which was two daies after the last quarter of ye Moon) there was observed this extraordinary in ye Tide: After it had flowed some time, it ebbed two foot; then flowed again, and then ebbed; and after flowed a third time, and so a fourth time: so that there were four flowings, and three ebbings in one Tide.

A Letter from Mr. Cony, dated Rochester March 27, was read concerning the raining of Fish, as it was supposed to have been in that cuntries some time since.—Mr. Cole of Bristoll mentioned a substance proceeding from Calamy oar, which far exceeds, in colour and finenesse, all metalls, beside gold, and silver.

**April 15, 1684.** Mr. Pulleyn informed ye Society, that an Elm, split at Cumnor, during ye late frost, was observed to have Ice in it: It was affirmed that vines have been split this winter, more frequently towards ye South, than any other, point of ye compass; and that they split more in ye Thaw following ye great Frost, than in ye frost itself: ye reason of ye former may be, because vines lye most open to ye South, and partly also (as Mr. Walker imagins) because ye sap-vessells are largest, and ye quantity of ye sap greatest in ye south side of ye vine, as in other Trees. Dr. Smith did himself observe, that ye Cedars of ye Physick garden, raised from seeds brought out of Syria, bore ye shock of ye frost, without being any way damaged. Mr. Crouch was desired to enquire, whether ye Cedars of Balliol College were any way injured. A Letter dated Aprill 10th, from Mr. Aston, Secretary to ye Royall Society, was read; which questioning whether a body, in shape like ye heel of a Shoe, presented by my Lord Bishop of Lincoln, to Dr. Plot, being esteemed as a Petrification of leather, be any thing more then a bare Incrustation. For ye satisfaction both of ourselves, and ye Royal Society, it was ordered, that this (supposed) Petrification should be examined, as to its make, and texture; more especially by boring it: Mr. Wm. Piggot tooke this charge on him.

Three papers of Dr. Lister's concerning thunder &c. proceeding from Pyrites; and a letter from Sir R. Southwell concerning ye compasses of a Ship being changed by lightning, were read.

A Peice of black Brittish Marble, spotted white, found in ye grounds of Mr. Wogan of Bolston in Pembrokeshire (who uses this sort of stone for ye making lime) was communicated to ye Society, by Dr. John Floyd, Vice-chancellor of ye University. It was ordered to be put in the Ashmolean Museum. This led us to discourse of sawing marble. It was affirmed by Mr. Wheeler that Little Veins, called *pins* by ye stone-cutters, run up and down, and are sometimes so many and so hard, that they dull ye teeth of ye tooles, so that many times it is not worth ye while to worke ye stone.