

phase, though separated from it by a barren deposit. As a rule it forms the base of the archaeological deposit of the Copper Age, which is found inland, proving that the waters stood at a higher level in the late Neolithic period.

The Eneolithic age evolves normally from the preceding Neolithic. The fact that the upper strata of this period were disturbed at a very early date points to the cultivation of the ground by the succeeding people of the Bronze Age. The occurrence of the Bronze Age dwellings at a greater distance than the Neolithic from the present shore points to a period of drought rather than to greater technical skill.

### University and Educational Intelligence.

**BIRMINGHAM.**—The report of the Vice-Chancellor to the Council for the year 1927–28, which will be presented to the Court of Governors at the annual meeting on Feb. 21, has been issued. The number of students for the session showed an increase on that for the preceding year, and a further increase appears in the present session. Pleas are advanced for the extension of the residential accommodation for women students, for an increase in expenditure on the library, and for more scholarships with which maintenance grants must be associated. The appointment of some senior members of the non-professional staff to Grade I. is urged on the ground that, if retirement at the age of sixty is compulsory, those who have not held for some ten years a post with a salary of not less than £600 are entitled only to a pension which is quite inadequate to services rendered. The Vice-Chancellor reports that the voluntary medical examination of women students on entering the University, which was instituted two years ago, has met with complete success, and it is hoped that similar facilities may be offered to men students. The report of the Joint Standing Committee for Research records a substantial output of research during the session.

**CAMBRIDGE.**—A syndicate consisting of the Vice-Chancellor; Sir J. J. Thomson, Master of Trinity; Prof. Seward, Master of Downing College; Dr. Willis, Dr. A. W. Hill, Dr. H. Hamshaw Thomas, Prof. A. G. Tansley, Sherardian professor of botany in the University of Oxford; A. Amos, R. A. Hayes, and F. L. Engledow has been appointed to consider the organisation and finance of the Botanic Garden and the relations between the Garden and the Department of Botany and other scientific departments, and to report to the University by the end of the ensuing term.

**EDINBURGH.**—At a meeting of the University Court on Jan. 28, Principal Sir J. Alfred Ewing intimated his intention to retire from the principalship of the University on Sept. 30 next.

**ST. ANDREWS.**—The Prime Minister, the Right Honourable Stanley Baldwin, has been elected Chancellor of the University and has written to Principal Sir James Irvine accepting the appointment.

RECENTLY Mr. Paul F. Williams, a well-known engineer and business executive of Chicago, Illinois, established the Paul F. Williams Research Foundation Fund for the promotion of scientific research at Purdue University, West Lafayette, Indiana. This fund provides for several one thousand dollar annual research fellowships. At least two of these will be available for physical research in the Graduate School of the School of Science. This is but one of the many evidences of the business man's interest in the building of a research centre at Purdue University, where knowledge may be created through fundamental research and applied through industrial research.

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### Calendar of Patent Records.

**February 9, 1832.**—During the steam-carriage boom that started about 1821 and lasted some years, several companies were formed and projected to run lines of coaches. The London and Birmingham Steam Carriage Company built in 1833 a coach of the type invented by Dr. William Church of Birmingham, and patented by him on Feb. 9, 1832. The coach had a single front wheel and was carried on air springs; its driving wheels were 8 ft. 6 in. in diameter, and had elastic rims and spokes; they were mounted on separate axles and geared by chains to the engine shaft. The carriage did not prove very successful and was not used after a few short trials.

**February 10, 1801.**—Green-houses for vines and other plants came into general use during the eighteenth century. The first patent for a hothouse was granted on Feb. 10, 1801, to James Anderson, the editor of the rare periodical *The Bee; or Literary Weekly Intelligencer*, 1791–94, and the author of several agricultural works.

On the same day, Feb. 10, 1801, the first patent for a fire-resisting safe was granted to Richard Scott, a colonel in the employ of the East India Company. The safe consisted of an outer casing with double walls of metal and a filling of charred wood soaked in an alkaline solution, and an inner metal box supported on all sides by pins.

**February 10, 1825.**—A great improvement was made in the candle by the invention of the plaited wick, which became untwisted and consumed as the candle burnt. The invention was patented in France by Cambacérés on Feb. 10, 1825, but it does not appear to have reached England until some years later.

**February 12, 1849.**—During the first half of last century, especially after the invention of photography, the forgery of Bank of England notes was very common, and many inventors applied themselves to the problem of devising means to circumvent the forgers and safeguard the public. The new issue of notes which was made from the Bank in 1855 was printed on paper manufactured according to a process patented by William Brewer and John Smith on Feb. 12, 1849, in which the design for the watermark is engraved on steel dies and transferred by stamping to brass plates fitted within the paper-making moulds.

**February 14, 1780.**—The well-known letter-copying press was patented by James Watt on Feb. 14, 1780. The patent specification describes, in addition to the usual screw-press, a rolling-press, which is the form that Watt himself preferred to use.

**February 14, 1876.**—Several claimants, notably Reis in Germany and the Italians Manzetti and Meucci, dispute with Alexander Graham Bell the right to be called the inventor of the telephone, but it was undoubtedly on Bell's experimental work and his United States patent of 1876 that the commercial development of the telephone is based, and from which its use as a practical instrument dates. Bell's application for his original patent and a caveat from Elisha Gray for a similar invention at which he had arrived independently were filed in the U.S. Patent Office on the same day, Feb. 14, 1876, within an hour or two of each other, but the actual times of filing were sufficiently well authenticated to enable the Patent Office authorities to pronounce definitely in favour of the priority of Bell, and his patent was duly sealed. Applications from Gray, Edison, Dolbear, Berliner, and others, followed in quick succession, and heavy litigation was only settled by the Bell Company buying up the whole series of inventions.