

By translating the story told by tree rings we have pushed back the horizons of history in the United States for nearly eight centuries before Columbus reached the shores of the New World, and we have established in our Southwest a chronology for that period more accurate than if human hands had written down the major events as they occurred.

We are now able definitely to announce the important dates in the history of Pueblo Bonito, oldest and largest of the great Indian communities, in Chaco Canyon, New Mexico.

Furthermore, we can now date nearly forty prehistoric ruins in the Southwest and reconstruct there a succession of major events through which Indian settlements rose, passed their heyday and disappeared.

Just as the far-famed Rosetta Stone provided the key to the written mysteries of ancient Egypt, so the collection of an unbroken series of tree rings has made clear the chronology of the Southwest.

Through this work we have learned of some outstanding events in America which were contemporaneous with the conquest of Spain by the Moors, and we know that certain Pueblo Indian settlements were enjoying their golden ages when William the Conqueror faced Harold the Saxon at the battle of Hastings.

These researches have carried the calendar back to A. D. 700 in the Southwest, and they have provided the beginnings of a continuous weather chart for 1,200 years.

The earliest beam we recovered from Pueblo Bonito was cut A. D. 919 from a tree that was 219 years old when cut. Pueblo Bonito had reached its golden age in 1067 and was still occupied in 1127.

The method which we have used in extending the historical calendar of the Southwest is the outcome of a long attempt to read the diaries of trees. Every year the trees in our forests show the swing of time's pendulum and put down a mark. They are chronographs, recording clocks, by which the succeeding seasons are set down through definite imprints. Every year each pine adds a layer of new wood over its entire living surface of trunk and branches.

If every year were exactly the same, growth rings would tell the age of the tree and little more. Only in rare cases would they record exceptional events of any interest to us.

But a tree is not a mechanical robot; it is a living thing, and its food supply and adventures through life all enter into its diary. A flash of lightning, a forest fire, insect pests or a falling neighbor may make strong impressions on its life and go into its diary.

But in the arid regions of our Southwest, where trees are few and other vegetation scarce, the most important thing to man and trees is rainfall. This fact has helped vastly in our dating work, for certain sequences of years become easily recognized from tree to tree, county to county, even from state to state.

#### THE PROPOSED SURGICAL BUILDING FOR YALE UNIVERSITY

A FUND of \$1,100,000 for a surgical building for Yale University at the New Haven Hospital is pro-

vided by the bequest of Mrs. Sarah Wey Tompkins, whose father, Dr. William C. Wey, served the community of Elmira, New York, for half a century as a leading physician and surgeon. Mrs. Tompkins during her lifetime gave to the university the tract of land near the Yale Bowl, now known as the Ray Tompkins Memorial, in memory of her husband. In her will, she made a bequest to Yale which has proved sufficient to enable the university now to proceed in accordance with the wishes expressed by the donor prior to her death. Work on the new building, to be known as the Sarah Wey Tompkins Memorial, will soon be begun.

The erection of this unit brings near to completion the modernization of the entire physical plant of the New Haven Hospital, in accordance with a plan adopted five years ago. Three sections of the hospital must still be provided. These are the pavilion for contagious diseases, an addition to the private pavilion for persons of moderate means and a women's pavilion. The completed plant will then represent an investment of \$8,000,000 in buildings, of which approximately \$6,500,000 has now been obtained.

The new building will have five hospital floors, and a ground floor for "out-patient," or dispensary, service. On the ground floor will be the examining and treatment rooms for surgery, including orthopedics, urology, physical therapy and accident and emergency units. The first floor will have 27 beds for male surgical patients; the second floor, 27 beds for women requiring general surgical treatment; the third floor, 24 beds for gynecological patients; the fourth floor, a nursery and 20 beds for obstetrical cases, and the fifth floor, 27 beds for eye, ear, nose and throat cases.

Each of the ward floors will have a treatment room, diet kitchen, doctors' room, nurses' room, solarium and open air balconies, and will thus have practically all facilities required for a hospital, with the exception of operating rooms, which have been placed in the Farnam building adjoining. There will be twelve single-bed rooms on each floor, one eight-bed room, and several two-bed and three-bed rooms.

Staff members in the department of surgery and the department of obstetrics and gynecology have their offices and research and teaching facilities in the Farnam Memorial Building, to which the new surgical pavilion will be connected on every level. Similar facilities for members of the department of internal medicine are provided in the new medical and pediatric laboratory building, with which the Raleigh Fitkin Memorial Pavilion and the proposed pavilion for infectious diseases will be connected. This arrangement will bring all the required facilities close together.

When the three new units still needed in order to complete the hospital have been provided, there will be about 440 ward beds for those who can not pay the full cost of hospital care and about 160 beds for patients who can meet this cost.

#### THERAPEUTIC TRIALS COMMITTEE OF THE BRITISH MEDICAL RESEARCH COUNCIL

ACCORDING to the *London Times*, the British Medical Research Council announce that they have appointed a Therapeutic Trials Committee, as follows, to advise and assist them in arranging for properly controlled clinical tests of new products that seem likely, on experimental grounds, to have value in the treatment of disease:

Professor T. R. Elliott, physician to University College Hospital, London, *chairman*.

Sir E. Farquhar Buzzard, regius professor of physics, University of Oxford.

Dr. H. H. Dale, director, National Institute for Medical Research.

The Right Honorable Lord Dawson of Penn, president, Royal College of Physicians, London.

Professor A. W. M. Ellis, physician to the London Hospital.

Professor F. R. Fraser, physician to St. Bartholomew's Hospital, London.

Sir John Parsons, ophthalmic surgeon to University College Hospital, London.

J. A. Ryle, physician to Guy's Hospital, London.

Sir John W. Thomson-Walker, consultant urologist to King's College Hospital, London.

Wilfred Trotter, surgeon to University College Hospital, London.

Professor D. P. D. Wilkie, surgeon to the Royal Infirmary, Edinburgh.

F. H. K. Green, *secretary*.

Conditions have been the subject of discussion and agreement between the Medical Research Council and the Association of British Chemical Manufacturers, under which the Therapeutic Trials Committee will be prepared to consider applications by commercial firms for the examination of new products, submitted with the available experimental evidence of their value, and will arrange appropriate clinical trials in suitable cases. The committee will work in close touch also with the existing Chemotherapy Committee, who are engaged for the Medical Research Council in promoting researches aimed at the discovery and production of new remedies.

The Therapeutic Trials Committee will invite suitable experts in particular branches of medicine or surgery to undertake the clinical tests of preparations accepted for trial. The reports upon the results will be published under the authority of the committee.

## SCIENTIFIC NOTES AND NEWS

DR. ROBERT A. MILLIKAN, of the California Institute of Technology, has been made Knight of the Legion of Honor by the French Government.

PROFESSOR RUFUS H. PETTIT, head of the department of entomology at Michigan State College, received the honorary degree of doctor of science at the commencement exercises at the college, in recognition of his high attainments as an investigator and teacher and of "his thirty-four years of loyal and efficient service."

DR. M. LUCKIESH and Frank K. Moss, of the Nela Research Laboratory of the General Electric Company, Cleveland, have been awarded the gold medal of the Distinguished Service Foundations of Optometry.

It is announced in the *British Medical Journal* that a fund is being inaugurated in order that the friends, colleagues and pupils of Colonel Thomas Sinclair, emeritus professor of surgery in Queen's University, Belfast, may have an opportunity to express their appreciation of his invaluable services to the Belfast Medical School. Professor Sinclair occupied the

chair of surgery from 1886 to 1923. The testimonial will probably take the form of a portrait to be painted and presented to the university.

PROFESSOR ARIENS KAPPERS, director of the Central Institute for Brain Research, Amsterdam, recently received the honorary degree of doctor of science from the University of Dublin. Professor Kappers delivered three lectures on diseases of the brain while in Dublin.

DR. BERNHARD FISCHER, professor of pathology at Frankfurt, has been elected an honorary member of the Royal Institute of Public Health, London.

DR. VICTOR MORITZ GOLDSCHMIDT, of Göttingen, has been elected a corresponding member of the Geological Society at Stockholm and a foreign member of the Geological Society of London.

M. JACOB, professor of geology at the Sorbonne, has been elected a member of the French Academy of Sciences.

COLONEL CHAS. F. CRAIG, director of the department of preventive medicine and clinical pathology at