

ception of the unpaired chromosome, which passes to one pole of the spindle.

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CURRENT NOTES ON METEOROLOGY AND CLIMATOLOGY

CHANGES OF CLIMATE?

IN his recent volume (Vol. II.) on "Ancient Khotan," Dr. M. A. Stein, whose explorations in Chinese Turkestan are well known, points out that it requires constant and persistent effort to keep up the irrigation of the oases in that region. The wind-blown sand and the shifting courses of the silt-laden, snow-fed rivers are always tending to change the course and scope of the irrigation systems. If man relaxes his efforts in the least, the sand and the aridity of the desert replace the fertility of the formerly irrigated oasis. This has happened in many cases within human experience. A swing of the climatic pendulum in this region, towards a drier period, is not thought improbable, but the ordinary physiographic forces at work there are held sufficient to explain the changes of population and of settlements which have been clearly made out.

Again, in the Lake Chad district of Africa, Lieutenant Secker, in northern Nigeria, has lately reported that he found that the natives, by erecting fish-dams on the river Yo, are diverting water which would otherwise flow into the lake. These dams collect large masses of weeds, and lead to the formation of marshland. Lieutenant Secker is of the opinion that this may have something to do with the reported drying-up of Lake Chad.

FOG DENSITIES

The Quarterly Journal of the Royal Meteorological Society for October, 1907, contains a suggestion by J. A. Lovibond, "On a Method and Apparatus for Measuring Fog Densities." The method is based on the power of selective absorption of suitably colored glass. When this has been graded into mechanical scales of equivalent color value, a beam of white light can be progressively ab-

sorbed to extinction, and the luminous value of each successive absorption stated in quantitative terms. This analytical power also applies to the color constituents of the beam.

RAIN GAUGES

The Quarterly Journal of the Royal Meteorological Society for October, 1907, also contains a paper, by Dr. H. R. Mill, on "The Best Form of Rain Gauge, with Notes on Other Forms." Dr. Mill strongly recommends the "Snowdon pattern," which is 5 inches in diameter; has a vertical rim to the funnel of 4 inches, and has an inner can and also a bottle.

NOTE

The Annuaire Météorologique of the Royal Observatory of Belgium for 1907 contains a discussion, by A. Lancaster, entitled "L'Humidité de l'Air en Belgique," and an account of balloon ascents in Belgium by J. Vincent.

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THE IOWA LABORATORIES OF ANIMAL BIOLOGY

AT the University of Iowa, new laboratories of animal biology have just been put into service under the directorship of Professor Gilbert L. Houser. These laboratories are located in a new and beautiful fire-proof building of thoroughly modern construction—the hall of natural science, erected by the state at an expense of three hundred thousand dollars. With the standard of their new quarters, the laboratories are entirely in keeping, so it is evident that the opening of these laboratories marks an epoch in the scientific facilities of Iowa.

The space devoted to animal biology comprises eleven rooms located in the north wing of the building on the second, the first, and the basement floors. This space is so unified, however, by a small elevator running through the rooms as to make the arrangement much more convenient than if all the space were on one floor.

The laboratories proper occupy the whole of the second floor of the north wing, the large

northern exposure giving excellent lighting. This space is chiefly devoted to two large laboratories—the introductory and the advanced, respectively. Each of these laboratories is forty-eight by fifty-three feet in size, and is lighted from three sides by nine very wide windows of plate glass. The heavily paneled ceiling is tinted pure white, and the paneling is supported by a row of beautiful scagliola columns running through the center of the laboratory. The side walls are tinted light buff.

The furniture is all of quartered oak, finished "Early English." Slate is used throughout for the tops of all laboratory tables. The tables assigned to students extend over sixteen feet into the room from the several windows, and their slate tops taper toward a narrow end away from the window, a device which permits each student to obtain unobstructed light for his work. These tables have a new and particularly successful form of electric microscope-lamp for every two students. Outlets for Bunsen burners comprise a part of the fixture at the base of each lamp. An abundance of individual drawer space is provided for each student. Microscope cabinets are ranged conveniently on the wall. And cabinet, drawer, microscope, lock, key—each is stamped with its own number.

The laboratory for introductory courses accommodates fifty-two students at one time; and the number of individual drawers permits the handling of two hundred and eight students in all. The advanced laboratory seats forty-four workers at one time, and the details of the tables here are especially adapted to such courses as require the extensive use of biological reagents. Each of these main laboratories has an adequate quota of general furniture designed for it, including cases for laboratory apparatus, a hood in the corner where reagents may be prepared without tainting the air of the room, and a large aquarium with an abundance of small jets of running water.

SCIENTIFIC NOTES AND NEWS

M. HENRI BECQUEREL has been elected president of the Paris Academy of Sciences, and

is succeeded in the vice-presidency by M. Bouchard.

PROFESSOR W. W. CAMPBELL, director of the Lick Observatory, and his party have returned from Flint Island, having obtained excellent photographs of the recent total eclipse of the sun.

THE Imperial Academy of Sciences of St. Petersburg has elected Professor Sir George Darwin, of Cambridge University, and Professor Charles R. Lanman, of Harvard University, to be corresponding members.

THE German Chemical Society has elected as honorary members M. Becquerel, of Paris; Sir William Crookes, of London; Dr. C. von Linde, of Munich; Professor E. Solvay, of Brussels, and Professor J. Thomson, of Copenhagen.

At the general meeting of the Royal Meteorological Society, on January 15, M. Teisserenc de Bort, the distinguished French meteorologist, was presented with the Symons memorial gold medal of the society, and the president, Dr. H. R. Mill, delivered an address on "Map Studies of Rainfall."

M. BAILLAUD, of the Toulouse Observatory, has been appointed director of the Paris Observatory.

C. E. MOSS, D.Sc. (Victoria University), has been appointed curator of the herbarium of Cambridge University.

DR. WILLIAM F. M. GOSS will be installed as dean of the College of Engineering of the University of Illinois on February 25. In the morning there will be addresses by the president of the university, by representatives of the trustees, of the alumni and of the faculty; followed by the installation address of Dean Goss. In the afternoon there is an inspection of equipment, followed by addresses of visiting engineers. These exercises are to be in connection with the formal opening of the graduate school, which occurs on February 4 and 5.

A DINNER in honor of Dr. Rudolf Leonhard, Kaiser Wilhelm professor at Columbia University this year, and Dr. John W. Burgess, Theodore Roosevelt professor at Berlin last