

UNIVERSITY AND EDUCATIONAL NOTES

ON the completion of the state general hospital now under construction at a cost of \$1,400,000 at the University of Wisconsin, the university plans a four-year course in medicine. The new hospital will have 300 rooms, twelve large wards and facilities for medical students to serve internships.

THROUGH an exchange agreement between Stanford University and Colorado Agricultural College, Professor Geo. T. Avery will take advanced work at Stanford the coming year.

PROFESSOR ROY G. COFFIN has been promoted to an associate professorship of chemistry in the Colorado Agricultural College.

DR. CHARLES H. DANFORTH has been promoted to full professorship in the department of anatomy at Stanford University School of Medicine.

DISCUSSION AND CORRESPONDENCE WHAT IS WRONG?

ONCE upon a time, a fable tells us, a bull, observing with pleasure the joyous frolics of some frogs, tried with the best intentions to assist in the sport, but the attempt was a failure. The unappreciative frogs cried out—"It may be fun for you, but it is death for us," and the bull withdrew, bewildered and disconsolate.

Some of us, engaged in research in industrial laboratories, may share the disappointment and bewilderment of the poor bull. We study with pleasure, profit and admiration the work of American research men in academic circles. We hope that our work in turn may benefit them, and to that end we freely publish our results. We even try in many ways to give direct assistance. We seek to strengthen the hands of our brother scientists and to earn their good will.

And now we are told by a very able man that we may be swallowing up "the soul of the university" (Dean Barus in the annual report of the president of Brown University, *SCIENCE*, April 13, 1923). We are crowding with our papers "the programs of the meetings of American learned societies." We are crushing "the incentives to a stimulating competition."

Dean Barus administers his rebuke in delightfully whimsical but earnestly forceful words, and, like the bull in the fable, we pause, disappointed and abashed, and ask—"What is wrong?"

Is there some corporate stigma we carry that makes us unfit companions in the cooperative study of Nature? Are we, too, branded with that "potent

cipher," "PAT," which Dean Barus finds marking the trail of "the trusts, as we fondly call them"? The industrial applications of our research may be patented, but we hope the new scientific facts we may discover will be without taint and of benefit to all scientific workers. Are we wrong in that?

Or is it the greater facilities of our laboratories, which, like the bull's avoirdupois, crush competition and overwhelm the professor's soul? If that is the trouble, what is the remedy? If the object of the competition were no more important than a golf championship, the Schenectady putter might perhaps reasonably be barred, as it is barred in England, in the interest of sport, but, in a game in which the object is the increase of human knowledge, an arbitrary limitation of implements would seem too extreme a concession to the sporting instinct. Would it not be better to put the best implements in the hands of all who could use them effectively?

And that, in a modest way, is precisely what we are trying to do. We are not wholly what the Old Soak calls a "mammal of unrighteousness," but if we were, our selfish interests would still insist on our helping academic research as far as we can, since what we, like the rest of the world, most need, and what is far more important to us than material equipment, is men, men with minds trained in scientific methods and filled with a sanely balanced enthusiasm for research. For this prime essential we must look to the universities, and we fully realize that only a vigorous spirit of research in the professor can awaken the spirit of research in the student, and that the spirit of research in the professor can be sustained and quickened only if he and his assistants are given time and facilities for advanced scientific work.

We keenly desire to help. If we are properly advised can we not really help?

Why can not a mutuality of interest and good will be developed between the workers in industrial and academic laboratories? We have tried to hasten such a development. Are we failing? If so, what is wrong?

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AN ANCIENT REFERENCE TO AIRSHIPS

THE suggested existence of airships in early days is found in a book published in 1922 by the Medici Society of London, "The Queen of Sheba and her only Son Menyelek," etc. This book is a translation of the "Kebra Nagast," with introduction by Sir E. A. Wallis Budge; the date of which manuscript Budge assigns to the sixth century, A. D., and the compila-

tion to probably "a Coptic priest for the books he used were writings that were accepted by the Coptic Church" (p. VIII).

The "Kebra Nagast," *i.e.*, The Glory of the Kings [of Ethiopia] has been held," says Budge, "in peculiar honour in Abyssinia for several centuries and throughout that country it has been, and still is, venerated by the people as containing the final proof of their descent from the Hebrew Patriarchs, and of the kinship of their kings of the Solomonic line with Christ, the Son of God." The book is "a great storehouse of legends and traditions, some historical and some of a purely folklore character, derived from the Old Testament and the late Rabbinic writings, and from Egyptian (both pagan and Christian), Arabian and Ethiopian sources" (pp. VII-VIII).

The reference to an airship follows the well-known incident of the visit of the Queen of Sheba to King Solomon, who, on the departure of the queen to her own country, gave her, among other fabulously valuable gifts, "a vessel wherein one could travel over the sea and a vessel wherein one could traverse the air (or winds) which Solomon had made by the wisdom that God had given him" (pp. 36-37), thereby, as Budge has pointed out, anticipating "the motor boat and the airship." As ordinary sailing vessels were certainly in use by the time of Solomon it is hardly probable that a vessel of either the galley type or of the sail type would be regarded as of any especially marvelous character. Budge apparently does not note the possible fact that King Solomon understood the construction of artificial lights suggesting modern incandescence, inasmuch as his (Solomon's) house "was illumined as by day, for in his wisdom he had made shining pearls which were like unto the sun, and moon and stars [and had set them] in the roof of his house" (p. 34). All of which would seem to indicate that life in the Solomonic days, save for a certain laxity in morals, was as comfortable and convenient as in the present.

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A FOURTH CAPTURE IN FLORIDA WATERS OF THE WHALE SHARK

ABOUT 11 o'clock on the morning of June 9, 1923, as Mr. Claude Nolan, of Jacksonville, Florida, was cruising with a party of friends in the Florida Keys near Marathon, sixteen miles below Long Key, a gigantic shark was seen. This was secured by two harpoons by Captain Newton Knowles, who later fired into it fifty or sixty shots from a 30-30 rifle. The giant fish did not offer much resistance and by the afternoon it was so far subdued that it was towed by a house-boat and two guide-boats to Long Key, where

it was tied up to the dock about 11 P. M. The fish remained alive until some time the second day, following, about fifty-four hours after it was harpooned.

Mr. L. L. Mowbray of the New York Aquarium by great good fortune was in Florida at this time. He had gone to Nassau, Bahamas, to install an aquarium there, but, finding the water in the harbor fouled by the dredging going on, left for Miami, where he arrived on the morning of June 9. Early the next day, hearing of the capture of a "huge monster" at Marathon, he took the first train for Long Key, and at once identified the fish as the whale shark, *Rhineodon typus*.

Mr. Nolan with great generosity presented this giant shark to the American Museum, and Mr. Mowbray at once wired the authorities. A member of our department of preparation left at once for southern Florida with orders to save the skin and all the hard parts possible. In the meantime Mr. Mowbray had advised that there were no facilities for handling the shark at Long Key and urged that it be towed to Key West. This was accordingly done, the start being made June 13, and the fish arriving at Key West at 4:30 P. M., June 14, much mauled by the attacks of tiger sharks on the way.

Unfortunately a wave of unprecedented hot weather struck southern Florida at this time, and the water in Key West harbor reached the unheard-of temperature of 91.4° F. This, aided by the fact that some of the fins had been torn off and the abdomen badly lacerated by sharks, produced rapid decomposition. The outer skin sloughed off, the internal organs were thoroughly macerated, and even the solid masses of thick, muscular tissue were in such condition as to call for immediate action. It was impossible to save the skin, but various hard parts were preserved in brine and brought to New York. We have parts of a tooth band, the cartilages of both jaws, the occipital part of the skull, a number of vertebrae, and parts of the claspers, and, in addition, sections of the skin.

Mr. Mowbray fortunately made a sketch of the shark and a set of careful measurements, and wrote out an exact description, noting position, size and shape of fins, coloration, etc. From these data a 63-inch model is now being constructed by our department of preparation. This will be molded and colored in accordance with Mr. Mowbray's notes, and can serve as a basis for building a life-sized model for our new hall of fishes. The fish was 31.5 feet long, 23 feet in greatest girth, and had a vertical spread of caudal fin of 12 feet. Mr. Mowbray and the writer plan to write for the *Bulletin* of the American Museum a fuller article on this specimen, illustrated by photographs of the fish and of the completed model.

This is the fourth specimen of *Rhineodon* recorded from the Florida coast, and the fifth in the Atlantic