Nature reports that the Secretary of the Department of Scientific and Industrial Research has made the following appointments at the British National Physical Laboratory: W. F. Higgins, secretary of the laboratory, has been appointed superintendent of the Division of Physics following a considerable period after the death of the late Dr. G. W. C. Kaye, in which he has been acting in that capacity; Dr. G. A. Hankins has been promoted to the superintendency of the Engineering Division of the laboratory to fill the vacancy caused by the resignation of Dr. S. L. Smith; E. S. Hiscocks, of the Raw Materials Department, Ministry of Supply, and previously of the Department of the Government Chemist, has been appointed secretary of the laboratory in succession to W. F. Higgins.

AFTER nearly two years in China, Dr. Joseph Needham, director of the British Council Cultural Scientific Office in China, has returned to Great Britain for consultations. He will go back to China early this year.

DR. A. G. H. SMART, medical adviser to the Secretary of State for the British Colonies, has been appointed representative of the United Kingdom on the Far Eastern Subcommittee on Health of the UNRRA.

DR. JACQUES ROUSSEAU has become director of the Montreal Botanical Garden to succeed Professor Marie-Victorin, who was accidentally killed last summer.

DR. G. M. SCHWARTZ, professor of economic geology at the University of Minnesota, has been on leave since June 15 for an investigation of various types of copper deposits for the U. S. Geological Survey. He has spent most of the time in Colorado and Arizona directing the exploratory work on porphyry ores. He returns to the University of Minnesota this month.

LECTURES are announced by the Chapter of the Society of Sigma Xi of Louisiana State University: On March 3 by Dr. G. W. Beadle, professor of biology at Stanford University; on March 19 by the Reverend Dr. James B. Macelwane, director of the Institute of Geophysics of St. Louis University, and on April 5 by Dr. Peyton Rous, member of the Rockefeller Institute for Medical Research.

COLONEL RICHARD P. STRONG, director of tropical medicine at the Army Medical School, Washington, D. C., delivered a lecture entitled "The Importance of Ecological Investigations in Tropical Medicine in the Present War" before the annual meeting on December 16 at San Juan of the Medical Association of Puerto Rico.

IT is announced that requests to the Committee on Research in Endocrinology of the National Research Council for aid during the fiscal period from July 1, 1945, to June 30, 1946, will be received until February 28. Application blanks may be obtained by addressing the Division of Medical Sciences, National Research Council, 2101 Constitution Avenue, Washington 25, D. C. In addition to a statement of the problem and research plan or program, the committee desires information regarding the proposed method of attack, the institutional support of the investigation and the uses to be made of the sum requested. No part of any grant may be used by the recipient institution for administrative expenses. Applications for aid in endocrine research on problems of sex in the narrower sense can not be given favorable consideration, but the committee will consider the support of studies on the effects of sex hormones on non-sexual functions—*e.g.*, on metabolism.

THROUGH a grant from the Rockefeller Foundation there have been established at the Cornell University Medical College and The New York Hospital "The J. Whitridge Williams Assistantships in Obstetrics and Gynecology," specifically designed for post-war training of a selective group that military service has deprived of advanced training comparable to that possible in the pre-war period. Lieutenant William F. Finn, U.S.A., M.C., has been awarded one of these assistantships.

A GIFT of $100,000 for a new building for the College of Pharmacy of Drake University, Des Moines, Iowa, has been made by the F. W. Fitch Company in recognition of the need for better facilities for training in the profession of pharmacy. The building will be constructed as soon as possible after material and labor are available and wartime restrictions permit.

DISCUSSION

SCURVY IN THE PARRY EXPEDITION OF 1819[1]

THAT tensile strength of surgical wounds is influenced adversely by the degree of vitamin C deficiency has been well established experimentally by Lanman and Ingalls[2] and others. Empirical observations to the same effect had been made in Hamilton's "Surgery" in 1865.[3]

The earliest recorded detailed clinical observation of impairment of wound healing in scorbutic patients, we believe, is in the "Journal of a Voyage for Dis-

[1] W. E. Parry, "Journal of a Voyage for the Discovery of a Northwest Passage," London, 1821.

[2] T. H. Lanman and T. H. Ingalls, *Ann. Surg.*, 105: 616, 1937.

[3] A. J. Lorenz, *Jour. Am. Diet. Assn.*, 20: 7, 432, 1944.

covery of a Northwest Passage" published in London in 1821. It is the report of the Polar Expedition of the *Hecla* and *Griper,* sent out by the British Admiralty and Board of Longitude in 1819–20 under command of Lieutenant William Edward Parry, R.N., F.R.S. Three surgeons, Drs. John Edwards, chief, Alexander Fisher and Charles James Beverly, assistant surgeons, accompanied the expedition and were placed in full charge of the food and sanitation as well as medical supplies of the two ships.

Recorded in the *Hecla's* log on Thursday, November 18, 1819, six months after the expedition had set sail from England:

> About this time our medical gentlemen began to remark the extreme difficulty with which sores of every kind healed.

Again on February 7, 1820, this entry by Lieutenant Parry is found:

> As we were now, however, approaching the coldest part of the season, it became more essential than ever to use the utmost caution in allowing the men to remain for any length of time in the open air, on account of the injury to their general health, which was likely to result from the inactivity requisite to the cure of some of the most trifling frost-bites. Mr. Edwards has favoured me with the following brief account of such cases of this nature as occurred on board the *Hecla:*—
>
> "The majority of the men who came into the sick-list in consequence of frost-injuries during the severity of the winter, suffered mostly in their feet and especially in their great toes;—few cures were effected without the loss of the nail and cuticle in which the vital power was invariably destroyed. The exfoliation of these dead parts was always slow, and often attended with small ulcerations at the extremity of the toe."

Two months before, the lemon juice ration had been reduced to ¾ of an ounce per man per day as a result of an accident to the expedition's major supply of bottled lemon juice. Ample antiscorbutic provision for the estimated two-year expedition had been made before setting sail.

My volume of Lieutenant Parry's *Journal,* which I fail to find listed in Hess's "Scurvy, Past and Present" or in any other bibliographies on historical records of scurvy, also contains a separate report by the ship's surgeons on the "State of Health and Disease of the Voyage."

Prefacing an autopsy report on the only fatality of the expedition, Surgeon Edwards states:

> A solitary case of diseased lungs occurred during this voyage, which, in its progress, was combined with scorbutic symptoms.

Since clear-cut autopsy reports on scorbutic subjects are relatively rare in the earlier literature, a more detailed account will be presented by the writer in a contemplated paper reviewing other aspects of this expedition.

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PURE SCIENCE

SUPPLEMENTING John M. Pearson's criticism[1] of Alexander W. Stern's note, "The Threat to Pure Science,"[2] since all sciences, apart from abstract mathematics, deal with material units of varying degrees of complexity in structure and behavior, does it not savor of priggishness to assume that "pure" sciences have a separate existence? The sciences constitute a vast interrelated mass of orderly arranged knowledge of natural phenomena, and it is high time that we should break down fictitious, pedagogical barriers separating them.

Beginning with recorded observations of the heavenly bodies, the science of astronomy recognized mathematically expressed "laws" (Kepler), an explanation of these laws with the aid of the newly developed calculus (Newton), and certain deviations from them (Einstein), based on the application of the recognized philosophical principle that all knowledge is relative, including even physical measurements. In 1868, Lockyer discovered helium in the sun with the aid of the spectroscope, but not until 1895 did Ramsay isolate it on earth from the mineral clevite; and modern astronomy leans heavily on physics and chemistry. From ancient times, astronomical knowledge served to guide travelers on land and sea; the invention of the chronometer by the mechanician, John Harrison, of the gyroscope compass by Elmer Sperry and the calculation of the "Ephemeris" are among the many gifts of other sciences to the science and art of navigation. Where does "pure" astronomy begin and end? Physics is learning from it of states of matter not yet producible by man.

Mr. Stern, a physicist, seems opposed to "professionalization." In physics, he says, this "will completely destroy freedom in science." In medicine, "the great majority of practitioners, being professional men, have neither time nor inclination to engage in research. Furthermore, as professional men they have no interest in pure science. Not until a scientific discovery or advance has gotten to the stage where they can use it, does it concern them. And then they are only concerned with its use and not with the scientific principles involved."

While in most sciences basic and spectacular advances are scored by a few, the success of these pioneers is facilitated by the painstaking work of

[1] SCIENCE, No. 2604.
[2] SCIENCE, No. 2599.