at Biltmore, North Carolina. During the disastrous floods of last July the Herbarium was largely inundated, suffering a loss of about three fourths of the botanical specimens and injuries to a considerable portion of the library. The uninjured specimens, chiefly phanerogams, number about 25,000, and will be of great value to the National Herbarium in augmenting its representation of southeastern plants. The collection contains, also, a large series of *Cratægus* specimens, including the types of many species described by Mr. C. D. Beadle, curator of the herbarium and an authority in this difficult genus. The library includes complete sets of several important botanical and horticultural publications, as well as many botanical works not hitherto in the National Museum.

UNIVERSITY AND EDUCATIONAL NEWS

A COMMITTEE of the Massachusetts Medical Society, consisting of Samuel B. Woodward, chairman, Dr. E. H. Bradford, Dr. Edward C. Streeter, Dr. Arthur N. Broughton, Dr. Peer P. Johnson and Dr. Philemon E. Truesdale, has been appointed to further the establishment of a department of military medicine, surgery and hygiene in the Harvard Medical School. It is proposed to raise an endowment fund of $100,000.

THE financial board of the University of Cambridge has issued a report on the estimated income and expenditure for the year 1917. Although the common university fund, which is derived from assessments of colleges, is slightly greater than in 1913, the university chest, which is largely derived from capitation fees, examination fees, etc., has fallen from £53,400 to £23,900. The board estimates that the normal expenditure on the university chest will be £36,200, as against an estimated income of £20,400, leaving a deficiency of £15,800. Towards this they are able to provide the sum of £12,700, leaving a deficiency of £3,100.

THE archeological and ethnological collections of the late Dr. J. William White, of Philadelphia, have been presented to the University Museum by Mrs. White.

AT the University of Virginia Dr. Theodore Hough, acting dean, has been made dean of the medical school; Dr. James A. Wardell, associate professor, has been appointed professor of pharmacology and materia medica, and Dr. John H. Neff, instructor, adjunct professor of genito urinary surgery.

AT Harvard University Earnest A. Hooton has been appointed instructor in anthropology, Clarence E. Kelley and Harlan T. Stetson, instructors in astronomy, William E. Brown, instructor in public health administration, Raymond E. Merwin, associate in Central American archeology, and Willis A. Boughton, assistant director in the chemical laboratory.

ASSOCIATE PROFESSOR W. M. CARRUTH, of the department of mathematics at Hamilton College, has been promoted to a professorship.

DISCUSSION AND CORRESPONDENCE

AN INSTITUTE FOR THE HISTORY OF SCIENCE

TO THE EDITOR OF SCIENCE: Referring to the proposal of an institute for the history of science and civilization, as outlined in a recent issue of SCIENCE,[1] the attention of all interested in this project is invited to the fact that the resources of precisely such an institution as has been proposed are indispensable to the full performance of its duties by the United States Patent Office, and to the fact that the resources of this office, inadequate as they now are, should in turn be at the disposal of the proposed institute, for the attainment of its separate purposes.

The suggestion is accordingly made that to the published list of important possible activities, there might most advantageously be added a sixth—the facilitation of prompt and reliable judgments upon all questions of novelty arising in connection with the administration of the patent laws, thereby aiding in the placing of the administration of such laws upon a secure scientific foundation. Surely the attainment of this additional purpose would be of sufficient public importance to deserve separate enumeration, and the furtherance of it

[1] SCIENCE, No. 1160, p. 284.

would constitute a most persuasive argument for the location of the new institute in Washington—within reach also of the Smithsonian Institution, the Bureau of Standards, the Bureau of Mines, the Department of Agriculture, the Geological Survey, the Medical Museum, the Carnegie Institution and the Library of Congress.

If any combination of circumstances can lead to united practical efforts toward common or related purposes on the part of those who seek a perfecting of the patent system, and those whose interests as scientists and educators extend beyond all current technical applications, it would seem past doubting that notable results must follow promptly.

In this connection attention is invited to the fact that the Patent Office is now admittedly unable to make an adequate application even of its present resources. The point here made is not that a surplus from the collection of fees is required to be turned over to the federal treasury, while the needs of the office for literature, laboratories, and men remain unprovided for. It is that the accumulation of patent grants has reached to such limits (about one and one quarter million grants), that, in the absence of adequate appropriations for the work of reclassification, the office is *unable to find the needles in its own haystack*. To quote from the current report of the Commissioner of Patents, Thomas Ewing:

> In 1890 there were 189 members of the examining corps, of whom 30 were examiners. The assistant examiners (who make the searches) numbered 159. Each assistant had to report on 251 applications per year.
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> In 1916 the corps numbered 367, of whom 43 were examiners and 324 assistant examiners. Each assistant must report on 210 applications per year.
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> The extent of the field of search is fairly represented by the United States patents granted and the available foreign patents. In 1890 there were 443,000 United States patents and 635,000 available foreign patents, making a total of 1,078,000. At the close of 1916 there were more than 1,210,000 United States patents and 1,690,000 available foreign patents, totaling 2,900,000.
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> From these figures it will appear that the number of applications to be passed upon by each assistant has been reduced since 1890 by seventeen per cent. The number of available patents through which search must be made is now two hundred and forty per cent. of what it was in 1890. The force relative to the work which it has to do is therefore less than fifty per cent. to-day what it was in 1890.
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> In order that such a situation may be met at all it is absolutely essential that the best method of classification should be adopted, the classification completed and kept up to date. Yet when I laid all of these facts before Congress and pointed out, as indicated in an earlier section of this report, that at the present rate of reclassification now going on it could not be completed under twenty-five years I succeeded in obtaining no relief whatsoever. Every recommendation that I made during the past year has been refused.

If there could be established *in the national capital* an institute devoted to a study of the development of pure and applied science, is it not important that, even though incidentally to other great consequences, there might be created in both the legislative and administrative branches a new appreciation of the work, the responsibilities, and the opportunities, of an existing establishment, charged under the constitution, "to promote the progress of science and the useful arts"? Certainly those who are now engaged upon the performance of this duty are not all insensible of their limitations, nor of the services of stimulation and cooperation which could be rendered by disinterested and competent men of science.

Bert Russell

Washington, D. C.

A CURE FOR SHOCK?

At a meeting of the Massachusetts Medical Society on June twelfth in Boston, Professor Walter B. Cannon, Shattuck lecturer in lieu of Dr. R. P. Strong (although both are now in France), detailed the probable physiology of traumatic and surgical shock, and suggested a possible cure. Dr. Cannon sees the essential primary condition in shock to be the vasomotor trapping of too much of the body's blood by the splanchnic veins—capacious enough to contain all the life-blood of the or-