Dr. Fellers was formerly associated with the U. S. Bureau of Chemistry and with the National Canners Association.

NORMAN W. KRASE has resigned from the Fixed Nitrogen Research Laboratory to accept an instructorship at Yale University in the department of chemical engineering.

THREE new instructors have been appointed in the geology department of the University of Michigan—Dr. Walter A. Ver Wiebe, Mr. R. L. Belknap and Miss Ellen Stevenson.

MR. M. DIXON, of Emmanuel College, Cambridge, has been appointed senior demonstrator in biochemistry for five years.

DR. WILLIAM F. SHANKS, who graduated with special distinction in physiology in the University of Glasgow, has been appointed professor of physiology at the University of Leeds.

DISCUSSION AND CORRESPONDENCE

WATER GLASS AS A MOUNTING MEDIUM

IN your issue of July 6, page 13, "water glass" is recommended as a substitute for Canada balsam as a medium for mounting objects for microscopic study. In 1870 I experimented with this substance, which at first appeared satisfactory, but after some months a host of fine acicular crystals developed in it, finally obscuring and completely ruining the slides.

WM. H. DALL

U. S. NATIONAL MUSEUM

I HAVE not used water glass in the way described by Mr. Dean T. Burk, but have been using it for years as a cement for fossils, pure or mixed with chalk or plaster of Paris. At first I found it satisfactory, being clean, drying quickly and fixing well. But after two or three years the glass changed its constitution, becoming crystalline, and the pasted objects became loose, so that I ejected it at once from my laboratory at Petrograd and never used it again.

I suggest that the same crystallization, and surely with the same sad effect, must take place in the water glass when used as a mounting medium for microscopic objects. In any case, the experience of some years is necessary to approve this method.

The use of water glass as a substitute for shellac in mounting insects on points, is, in my opinion, for the reason given above, absolutely unacceptable. If such a substitute is looked for by entomologists, I would recommend them to try the solution of some celluloid in acetone, a composition that I have used for years very successfully as a cement for fossils. This solution is just as handy as water glass, but it has not the inconvenience of the latter and can be prepared of different consistencies, an important item in many cases.

The celluloid, remaining after the evaporation of acetone, pastes together very strongly, keeps its property practically forever and in comparison with shellac is nearly colorless, unaffected by heat and does not snap off.

T. TOLMACHOFF

CARNEGIE MUSEUM

IN connection with the article by Dean T. Burk, of the University of California, in SCIENCE for July 6, I wish to call attention to an article which I published in the *Journal of Applied Microscopy and Laboratory Methods*, just twenty years ago, the exact date being July, 1903. The method is given in detail, together with its advantages and disadvantages, and at that time had been in use by myself and associates for about two years.

There are several objections to the use of water glass for mounting histological and pathological sections, the main ones being its poor clearing power and its alkaline reaction, which would have a detrimental effect on many stains. The method is of value for certain unstained preparations, notably vegetable fibers, if only moderate durability is desired.

CHARLES E. M. FISCHER

THE FISCHER LABORATORIES, INC.

FILING REPRINTS

DR. W. G. FARLOW filed his reprints in very shallow, flat drawers, laying them face up, one in a place. I began by binding mine into fairly good sized volumes with an index. Afterwards, having to consult one number in a volume repeatedly, I became weary of handling the heavy book for the sake of a tiny separate and abandoned this method. Ten or fifteen years ago I adopted one similar to that described by Edwin G. Boring in SCIENCE, October 26, 1923, and have found it very convenient and satisfactory.

Apparently the only difference is that I buy my boxes by the 5-hundred from a box maker and have the sides cut beveling at the top so that the top width of the side is 2 inches and the bottom width is 7½ inches, the lower end of the bevel running out at a height of 4 inches from the bottom of the box. The height of the box is 11 inches, the width of it, outside measurement, 3 3/16 inches, giving an inside measurement of 3 inches. On the back of each one I paste a typewritten list of the authors inside, arranged alphabetically. I write at the top of each separate, on both the front and back, the name of the author, and the object of the bevel is now apparent because when the box is pulled out the upper back corner of the separate projects out of the box. By running them over with my fingers I can see in a moment, without looking at the titles, all I have by a given

author, and whichever way I grab up the box—front or back. It is so long since I have had any of these boxes made that I do not remember the cost and, of course, that would vary with the locality and material. The boxes I have are made of good grade pasteboard, about 3/32 inch thick, covered at back and joints with black cloth. The only objection to such open boxes is dust, but if they are shut into glass-faced, unit-size, extra high, bookcase sections, the glass front lifting to a horizontal position and sliding back over the boxes, the dust difficulty is not great. Tiers of these, one above the other, enable one to see at a glance all his separates on a given subject. The units I have are about 12 inches deep, 15 inches high and each one will hold 9 of these boxes. They are known as book-case sections, outside dimensions 33 inches wide, 13 inches deep and 16¾ inches high, fitted with disappearing glass panel door with non-binding device, and were purchased from the Globe-Wernicke Co.

ERWIN F. SMITH

GERMAN SCIENTIFIC MEN AND RESEARCH

IN these sad times of political and economic depression in Germany, it is worth while to note the interest that is still maintained in research among the German scientists. The writer attended the third annual congress of the *Deutsche Gesellschaft für Vererbungswissenschaft* which met in Munich from September 24 to 27 of the present year. The meetings, which were held in the anatomical institute of the university, were presided over by Richard von Hertwig and were attended by three hundred scientists. The program was divided into three sections for the reading of papers—the botanical papers coming on Monday, the zoological on Tuesday, and the anthropological on Wednesday. For Thursday, an excursion was planned into the Tyrol.

More important to the writer than the papers read was the fact that, in such times as these, university professors were willing to spend from their salaries (about two hundred and fifty dollars a year) a sum equal to one or two weeks' income, and this at a time when the railroad fares were to be increased two and a half times before their return home. The excursion into the Tyrol was announced as fourth class on the railroad and most of those present had traveled fourth class to Munich. Black bread without butter at home, board seats on the railroad, but genetics at Munich! About one fourth of those in attendance were women, and women took part in the discussion. Among those present were such well known men as Hertwig and Goebel, of Munich; Spemann, of Freiburg; Lehmann, of Tübingen; Oehlkers, of Heidelberg; Kniep, of Würzburg; Renner, of Jena; Winkler, of Hamburg; Goldschmidt and the younger von Wettstein, of Dahlem; Buder, of Griefswald, and the elder von Wettstein, of Vienna.

F. C. NEWCOMBE

STUTTGART, GERMANY

QUOTATIONS

MINERVALS

A CONTRIBUTOR to the current number of SCIENCE named Welsh, writing from Nirvana (not the state of beatific freedom from earthly ills, but Nirvana in the State of Pennsylvania), makes reply to an earlier contributor, Professor Preston Slosson, in the matter of the meager salary of Professor Blank as compared with the income of John Smith, merchant. Professor Slosson, as protagonist for Professor Blank, shows that his client's salary can never be more than $4,500 at 60, at which age he is retired on half pay—that is, less than $2,500; while John Smith, merchant, starting at 15 years of age as an office boy at a salary which Professor Blank does not have until he is 25, is at 60 enjoying profits of $25,000 a year as a retired stockholder, or ten times the income of Professor Blank. He holds that Professor Blank's salary ought to be at least $8,000 or $10,000. Otherwise the business world can always outbid the college for the services of able men. He contends that the leisure of the college man (which is supposed to justify a smaller money stipend) is a myth, and that while the pleasantness of his occupation is undeniable, if salaries were cut down on that account some of the wealthiest men should have a like cut, since they are "hardly happy" away from their offices and would enjoy a Latin professorship even less than a Latin professor would enjoy a seat in the Stock Exchange.

Moreover, while business has its millionaires, education has none. Its "minervals" are reckoned in thousands at most. Even the authors of text-books do not rise to great wealth. The economic value to society of the research scientist of the highest calibre may be many times that of the ablest banker or railroad president, and yet he may be enjoying but a small fraction of the latter's salary (witness Dr. Steinmetz's insignificant savings of a lifetime). It would be only a fitting recognition to pay these outstanding men of science as much at least as a first-class "realtor."

Comes now Mr. Welsh, of Nirvana, and says that John Smith, merchant, is far beyond the average merchant in his income; that of those who attempt business for themselves 90 per cent. are failures and are forced to drop out with their capital completely used up; that those who succeed are the most severely selected class in the world; that the average professors should be compared not with the successful business man but with his employes, and that they get