

labor involved in setting it. It is true that in both cases no money outlay may be involved, for he may set the posts himself, after getting them from his own wood-lot. Of the posts used last year in Iowa, seventy per cent., it is estimated, were grown on the farms where they were used, or were obtained from other farmers or wood-lot owners, and only thirty per cent. were bought from lumber dealers. Nevertheless, the farmer is out his labor and the part of the product of his wood-lot which is used up, even though he does not pay out any cash. The facts concerning the use of fence posts in Iowa were brought out by an investigation which the Department of Agriculture has been making through inquiries sent to farmers. Several thousand replies have been used in compiling the figures, which, combined with statistics issued by the Iowa State Board of Agriculture as to the number of farmers and the acreage, furnished the totals. According to these totals about 10,000,000 posts are called for yearly to build and repair fences on 209,163 farms, of an average size of $158\frac{1}{2}$ acres each. The average life of a fence post is stated to be fourteen years and the average cost 13.7 cents. There is, however, great difference in the lasting properties of different woods. Osage orange lasts more than five times as long as willow does, and for length of service it heads the list of post timbers in the state. The comparative life of other posts is shown in the following list ranging from the longest period to the shortest: red cedar, locust, white oak, northern white cedar (or arborvitæ), catalpa, black walnut, butternut, red oak and willow. The average cost of posts varies for different woods, and for the same woods in different localities. Red cedar is most expensive, at an average of $26\frac{1}{2}$ cents each, and willow the cheapest, at 6 cents. Taking into consideration the time a post will last, and the cost of buying it and setting it in the ground, the conclusion must be drawn that the osage orange post is the most economical in Iowa, followed by white oak, locust, catalpa, red cedar, black walnut, butternut, willow, white cedar and red oak, in the order named.

UNIVERSITY AND EDUCATIONAL NEWS

By will of Ezra J. Warner, '61, Middlebury College will receive \$25,000 as an endowment for the care and maintenance of Warner Science Hall and the purchase of apparatus and supplies for the departments which are housed in that building.

A SCHOLARSHIP valued at \$1,000 per year for advanced work in architecture has been offered to the trustees of the University of Illinois by Mr. Francis John Plym, of Niles, Mich.

THE trustees of Princeton University have accepted the resignation of President Woodrow Wilson and have elected John A. Stewart, senior trustee, to be acting president. Dr. Wilson retains the McCormick chair of jurisprudence and political history.

DR. JOHN B. ELLIOTT, Jr., has been made chief of the department of medicine of Tulane University, to succeed Dr. George Dock; Dr. J. Birney Guthrie has been made professor of clinical medicine, and Dr. R. Clyde Lunch, professor of oto-rhino-laryngology in the post-graduate department.

DR. ROBERT W. HEGENER has been promoted from instructor to assistant professor of zoology in the University of Michigan.

HENRY R. KREIDER, Ph.D. (Hopkins), has been appointed assistant professor of Chemistry at the Baltimore Medical College.

THE department of botany at Syracuse University is enlarged by the addition of Assistant Professor L. H. Pennington, recently of Northwestern University. Laboratory equipment is being installed for work along the lines of physiology and plant pathology.

AT Princeton University there have been appointed to instructorships, Richard L. Cary in mathematics and Mr. K. K. Smith in physics.

MR. W. L. UPSON, of the Ohio State University, has been appointed professor of electrical engineering in the University of Vermont.

PROFESSOR PAYR, of Griefswald, has been called to Königsberg as director of the surgical clinic to succeed Professor Lexer, who goes to Jena. Payr's successor is Professor

Fritz König, of Altona, a son of the noted Berlin surgeon.

DISCUSSION AND CORRESPONDENCE

NOMENCLATURE AT BRUSSELS

FROM the report of the chief features of the rules of nomenclature adopted at the Brussels Botanical Congress, which recently appeared in *SCIENCE*,¹ it appears to the writer that while some advance has been made, we are still far from a satisfactory solution of the problem.

One important feature of the rules adopted is the establishment of multiple dates or starting points for the nomenclature of different groups of plants. Eight different dates have been adopted and it is proposed to select still others later. It is difficult to see what good can be accomplished by the use of different dates as starting points for different groups. It has been urged that the adoption of an early date, as 1753, in the case of many groups of cryptogams, involves the recognition of numerous uncertain and obscure genera and species. This is a difficulty which can not be escaped. Whatever date may be selected there will still be many of these uncertainties and no manipulation or multiplication of dates will serve to avoid them. If the purpose is to avoid such inconveniences, why not adopt as recent a date as possible? It is doubtful, however, whether we shall ever be able to devise a plan which will relieve us of the necessity of deciding, in many cases, whether genera and species shall be discarded as unrecognizable or accepted on tradition or arbitrary authority. The adoption of multiple dates simply multiplies the difficulties of applying the rules.

The case of lichens and fungi furnish an excellent illustration of this. The rules, of course, do not recognize the growing belief on the part of many botanists that lichens are really fungi and should be treated as such taxonomically and nomenclatorially. It is well known to biologists that the boundaries

of all groups of living organisms are more or less uncertain and indefinite and authorities frequently differ as to whether a genus should be placed in one group or another. Certain genera are treated by some authors, even those who believe in the autonomy of the lichens, as simple fungi and by others as true lichens. Such cases are multiplied as each new starting point is adopted, which necessitates the drawing of new arbitrary lines of separation between groups of genera and species. It necessarily follows, therefore, that to reach uniform results in the application of the rules, there must be an arbitrary assignment of all the genera involved to particular groups before the date to be followed can be determined.

Then again, the evolutionary and historical aspects of the subject would seem to deserve some slight recognition and consideration. Plant names, like everything else, have a history and evolution which in many cases is closely associated with the growth of our knowledge of the biology of the organisms to which they are applied, and though we may not be justified, in this utilitarian age, in the opinion of some at least, in burdening science with the names of the discoverers or describers of genera and species and though we may deny that any ethical questions are involved in crediting or discrediting such persons, it is doubtful whether we are justified in ascribing to Fries or Persoon, or any other mycologist, the genera and species of previous authors which they have either confused, misconstrued or appropriated entirely. Such a procedure seems to be approved and endorsed by the form of citation adopted by the congress as illustrated by the example given: "*Boletus edulis* Fr., instead of *B. edulis* Bull.," or the clumsy form, "*B. edulis* Fries ex Bull." Why not write *B. edulis* Bruss. Cong., or omit entirely all citation of author or authority, and thus at least avoid misleading those who know nothing of the history of the organism and its name.

These matters are, however, of very slight importance compared with the fundamental question of types, a question which does not

¹ Farlow, W. G., and Atkinson, Geo. F., "The Botanical Congress at Brussels," *SCIENCE*, N. S., 32, pp. 104-107, July 22, 1910.