steeper. A student reporter thought it to be his duty to announce to the newspaper world that a new law of physics had been discovered, and the importance of the discovery seems to have increased with each successive announcement.

This experience reminds me of a similar one which happened to me years ago. At the time when reporters everywhere were rushing to physics laboratories in order to learn something of X-rays, a reporter came to me. He found me experimenting with Hertz waves. By means of a large double-convex lens of wax, the waves were being brought to a focus upon a photographic plate enclosed in a wrapping of black paper. For several weeks I had been trying to produce a shadow picture upon the plate. The reporter seemed interested, and he seemed to have some intelligence. He could appreciate the evidence that the lens caused a refraction of the rays. Although he was informed in the most emphatic manner that this was not a refraction of X-rays, the public announcment was made that I had succeeded where others had failed, in the refraction of X-rays.

It seems to be impossible to quench a disturbance of this kind when it has once been emitted from a news-agency. Scientific readers have probably had enough of such experience to see the importance of keeping, in an accessible place, a few grains of salt.

Francis E. Nipher

THE INDUSTRIAL FELLOWSHIPS AT PITTSBURGH

To the Editor of Science: The industrial fellowship project, originated in the University of Kansas by Professor Robert K. Duncan and now in flourishing operation under his direction in the University of Pittsburgh under the name of the "Mellon Institute of Industrial Research and School of Specific Industries," has been more than once subjected to the criticism which found a place in an otherwise favorable reference in the presidential address of Mr. Arthur D. Little to the American Chemical Society at its recent meeting at Rochester:

¹ Science, November 7, 1913, p. 652.

While some doubt may reasonably be expressed as to the possibility of close individual supervision of so many widely varying projects, the results obtained thus far seem entirely satisfactory to those behind the movement.

When first made this criticism had, I think, some validity. But to any one who has come into touch with the Mellon Institute, even as a visitor, it must be evident that the difficulty has been squarely met by "those behind the movement." The endowment of the fellowships is now so liberal as to permit of the employment of investigators of experience, who do not require "close individual supervision." In consequence, the relations of the Director and the Fellows are rather comparable to those of a university president and his corps of professors and instructors than to those of a university professor and his class of graduate students. Furthermore, the director is now assisted in the work of supervision by an associate director and an assistant director. Thus the services of three advisers are at the command of each Fellow, who may, moreover, obtain help from his colleagues without divulging the secrets of his own research.

If one acquainted with the project merely as an onlooker might venture an opinion upon the qualifications most essential to the success of the director of such an institute, it would be that a wide and sound general knowledge of scientific principles, a broad sympathy enabling one to appreciate the widely differing viewpoints of business men and of investigators and inventors, an active but disciplined scientific imagination and a strong, firm will are of more importance than an encyclopedic acquaintance with details.

J. F. SNELL

MACDONALD COLLEGE QUEBEC, CANADA, November 18, 1913

SCIENTIFIC BOOKS

Untersuchungen ueber Chlorophyll. Methoden und Ergebnisse von RICHARD WILLSTAETTER und ARTHUR STOLL. Ein Bd., pp. 424, mit 16 Text-figuren und 11 Tafeln. Verlag von Julius Springer, Berlin. 1913. M. 18.00, geb M. 20.50.