as well, for we all have much to learn from the great master of our science. W. A. N.

STUDIEN ZUR KENTNISS DER ABHÄNGIGKEIT DER VISCOSITÄT DER FLÜSSIGEN KÖRPER VON DER TEMPERATURE UND VON IHRER CHEMISCHEN CONSTITUTION. By Alexius Batschinski. 101 pp. 17 × 25 cm. Moscow. 1901.

Though large enough to be a monograph, this is really a reprint of a journal article. The author has previously called attention to the fact that with most liquids the product of the internal friction into the absolute temperature is a constant. Data are given showing the application of this law to one hundred and forty-four different substances. In general, the agreement is good ; but anhydrides, acids, alcohols and water form exceptions. These are all substances which we consider as polymerized in the liquid state. WILDER D. BANCROFT.

THE EXPERIMENTAL STUDY OF GASES. By MORRIS W. TRAVERS, D.Sc. New York : The Macmillan Co.

Dr. Travers' book confines itself to methods of experiment which have been useful in researches on the properties of gases and to a description of some of the more important of such researches. It does not contain lecture experiments, nor instruction for beginners. In the selection of topics, it is well balanced, and as complete as can fairly be demanded of its 320 pages ; chapters on mercury pumps, on stop-cocks and other connections, on the collection and storage of gases, on reading instruments, and on calibration, have their due place. The chapters on the preparation of pure gases, on gas analysis, and on the determination of densities, are interesting and satisfactory, as are those on the relation of temperature, pressure, and volume, on vapor pressure and critical constants, and on specific heat.

The most interesting chapters, naturally, are those which have more or less to do with the newly discovered gases. That entitled "The Gases of the Helium Group" describes the method used in isolating argon, and that afterwards used to obtain it in considerable quantity, and narrates the steps which led to the discovery of helium, neon, krypton, and xenon. A chapter on the liquefaction of gases explains all the new principles which have been utilized and the new processes which have been used in liquefying gases since the time of the experiments of Pictet and of Cailletet. Here is found a clear account of Hampson's machine for liquefying air ; it is stated that this machine will