

tions and could be used to characterize the cellulose, but in the presence of wool, the formation of oxycellulose is more difficult than the transformation of cellulose into carbohydrates.

EDM. JANDRIER.

Repairing Beckmann Thermometers.—It often happens that a Beckmann thermometer is broken, leaving the inner tube, containing the mercury, intact.

I have repaired such breaks as follows :

Select a piece of glass of the same kind as is used in the thermometer (usually Jena glass) of sufficient length to take the full length of the scale, plus the length necessary to make the joint come below the scale. This is necessary in order to avoid a joint opposite the scale which would make the reading inaccurate or impossible.

Cut off the broken end at the proper point, and wrap the inner tube with a piece of asbestos three or four inches long, tying it on with a piece of wire. Slide the asbestos down until the middle of it is opposite the place where the joint is to be. Slip the large tube over the inner tube and make the joint with a small flame from a blast-lamp. Cool, and dissolve the wire from the asbestos in a suitable acid. Wash out the asbestos, and dry with alcohol and ether. Insert the scale and put on the cap.

The thermometer is practically as good as new if the joint has been properly made. Anyone who can make a *good* joint can repair a thermometer in this way.

J. C. CHRISTENSEN.

NEW BOOKS.

INDICATORS AND TEST-PAPERS: THEIR SOURCE, PREPARATION, APPLICATION AND TESTS FOR SENSITIVENESS. A Résumé of the Current Facts regarding the Action and Application of the Indicators and Test-papers which have been Proposed from Time to Time, and are in Present Use in Chemical Manipulations, with a Tabular Summary of the Application of Indicators. Designed for the use of Chemists, Pharmacists, and Students. BY ALFRED I. COHN, PH.G. New York: John Wiley & Sons. 1899. pp. ix + 249. Price, \$2.00.

A practically very useful compilation of the methods of preparation, uses, and tests for a very large number of indicators and