increases. After six or eight hours' contact with the platinum black, the mixture is, therefore, exhausted with water, and the aqueous solution is evaporated to a small bulk in vacuo on a water bath. The reactions of the solution leave no doubt of the presence of an aldehyde; it reduces cupre-potassic solutions, and precipitates silver, in the form of a mirror, from ammoniacal silver nitrate. It becomes brown when boiled with caustic alkalies, or with lime or baryta water; it becomes heated when agitated with a solution of sodium acid sulphite, and alcohol precipitates from the liquid a gummy matter, from which, however, it has not been possible to obtain the aldehyde either with sodium carbonate or with sulphuric acid.

Glyceric aldehyde has the same composition as glucose, and its most important property is that of fermenting under the influence of yeast; carbon dioxide is disengaged, and alcohol is formed, the latter having been identified only by the iodoform reaction in the distilled liquid. The fermentation takes place slowly, and is never complete, this being probably due to the presence of an excess of glycerin, which retards greatly the fermentation of glucose.

Whether the product is really glyceric aldehyde, or a glucose of the formula $C^6H^{12}O^6$, is at present impossible to decide, and the author has only published his results as a measure of priority, Fischer and Tafel having obtained hydrazinic derivatives of the same aldehyde. W. H. G.

THALLIUM IN PLATINUM. H. N. Warren (*Chem. News*, 55, 241).—After having detected thallium in platinum wire and foil by spectral analysis, the author endeavored to separate the metals. Ten grammes of the wire was dissolved in nitrohydrochloric acid, and after evaporation to dryness and resolution in very dilute nitric acid, hydriodic acid was added, and the thallium precipitated as iodide. The proportions of thallium found varied from 0.02 to 0.1 per cent., the wire containing more than the foil. Alloys of platinum and thallium containing 0.5 per cent. of the latter are useless for wire, and two per cent. thallium gives an alloy fusible at a red heat. W. H. G.

Franklin Institute.

[*Proceedings of the Stated Meeting, held Wednesday, October 19, 1887.*]

HALL OF THE INSTITUTE, October 19, 1887.

MR. JOSEPH M. WILSON, President, in the Chair.

Present, 114 members and eighteen visitors.

Additions to membership since the previous meeting, eight.

The Secretary reported, on behalf of the Committee on Science and the Arts, the award of the ELLIOTT CRESSON Medal to THOMAS SHAW, of Philadelphia, for his System and Apparatus for Automatically Testing Mine Gases, and for Signalling in Mines.

Mr. JOHN CARBUTT, of Philadelphia, gave an oral account of the various plans that had been proposed for taking instantaneous photographs at night, or in tunnels, etc., by the use of an artificial "flash" light; and described and gave a demonstration of the latest plan for this purpose, in which a mixture of gun-cotton and pulverulent magnesium is employed as the source of the "flash" light. Mr. CARBUTT'S remarks have been referred for publication.

Prof. GEORGE FORBES, F.R.S., of London, England, by invitation, described a new apparatus of his invention, intended for the measurement of electric currents, which he termed a "coulombmeter," and gave a practical demonstration of its use. Referred for publication.

The Secretary reported that since the last meeting, the INSTITUTE had suffered the loss by death of JOSEPH E. MITCHELL, one of its Vice-Presidents; and of HECTOR ORR, one of the oldest members of the INSTITUTE, and for many years a member of the Board of Managers. He stated that the Board had taken measures to have prepared and published in the JOURNAL a suitable memorial of the deceased members.

Mr. SAMUEL R. MARSHALL was elected to the Board of Managers for the unexpired term of HECTOR ORR, deceased.

An election to fill certain vacancies in the Committee on Science and the Arts resulted as follows:

Mr. JOHN R. MCFETRIDGE was elected in place of HECTOR ORR, deceased.

Mr. CARL HERING was elected in place of Dr. N. A. RANDOLPH, deceased.

Mr. H. W. SPANGLER was elected in place of Mr. E. A. GIESELER, resigned.

Prof. LEWIS M. HAUPT made some remarks upon the incongruity at present existing in the assignment of the work of the numerous scientific and engineering bureaux to certain departments of the Government, and commented upon the consequences of this absence of proper system, and on the desirability of a change. He offered a series of resolutions, stating the foregoing facts, and urging upon the National Congress the necessity of a reform.

The subject was referred to a committee with directions to make a report at the next stated meeting.

Mr. HENRY G. MORRIS, of Philadelphia, exhibited and described a novel and ingenious form of traveller for drawing electric wires through conduits. Referred for publication.

The Secretary exhibited a remarkable specimen of blacksmiths' work, in the form of a beautifully-symmetrical goblet of steel, entirely hand-forged—without boring or drilling—from a one and one-half-inch round bar of steel. The maker is Mr. FRED'K SEARLE, in the employ of the Simond's Koller Machine Company, of Fitchburg, Mass.

Adjourned.

WM. H. WAHL, *Secretary*.