The '5-hydrazone melts at 106°, and is easily decomposed, even by prolonged heating with alcohol.

According to Hantsch & Werner's theory, they should receive the formula:

## CAMPHORIC ACID. By W. A. NOYES. [ABSTRACT.]

When methyl sodium camphorate is treated with phosphorus oxychloride and the product obtained is treated with ammonia, an amide having the formula  $C_sH_{14}$   $\stackrel{CO_2CH_3}{CONH_2}$  is obtained. When this amide is treated with a solution of sodium hypobromite, an amine, probably of the formula  $C_sH_{14}$   $\stackrel{CO_2CH_3}{NH_2}$  is obtained. The study of these compounds is still in progress, and it is hoped that others may be obtained from them which

will throw new light on the structure of camphoric acid.

The detection of strychnine in an exhumed human body. By W. A. Noyes,

## [ABSTRACT.]

The stomach, liver, and a portion of the intestines of a child were submitted for examination on April 26th of this year. The child died on June 23d, 1892, and was buried the following day. The body was exumed on April 25th, 1893. A small amount of strychnine was recovered and was identified by the reaction with potassium pyrochromate and sulphuric acid, by the bitter taste, by the crystalline form, by the crystals obtained from the chloride with potassium chromate, and by the effect of a

small portion on a small frog, The frog died after developing the tetanus characteristic of strychnine poisoning. The case is of interest because of the length of time which elapsed before the body was exumed, there being few, if any, cases recorded where strychnine has been found in an exhumed body after so long a time; also, because a considerable portion of the strychnine was retained in the fatty matter and required different means from those usually employed for its separation. A full account of the case will appear in the Journal of the American Chemical Society.

The absorption of poison by dead animal tissue. By P. S. Baker.

The alarming frequency of the criminal use of arsenic has led to the study of its effects on the bodies of living and dead animals.

There has been reason to believe that arsenic was introduced into the bodies of men after death, and that involved the investigations of the courts in more or less confusion. Inquiries have therefore been made as to whether arsenic may or may not be absorbed by the corpse from external sources, and the answers to these inquiries have never been satisfactory.

The author has found by numerous experiments on cats that arsenic injected under the skin, from twenty to thirty minutes after death, will penetrate to the internal organs; but if the injection be made later than seventeen hours after death, it could not be found in the internal organs.

The work is still in progress to answer several questions involved in the study.

On the variation of strength of timber at different parts of the cross section of the tree. By Prof. T. Gray.

[ABSTRACT,]

In Bulletin No. 8, of the Forestry Division of the U. S. Department of Agriculture, Prof. J. B. Johnston refers to this subject in connection with a series of tests on long-leafed pine. Prof. Johnston's experiments showed a variation of about 12 per cent. of the average tensile strength, the maxi-