

decompose the HCl, the chlorine will combine with the zinc to form zinc chloride which will be dissolved and removed from further action. The atom of hydrogen set free will combine with the adjacent chlorine which will leave another free atom of hydrogen. This change will be propagated throughout the whole mass in every direction until finally there will be a freed atom of hydrogen contiguous to the platinum plate, this will give up its excess of positive electricity to neutralize the negative platinum and then escape as gas. Now as the electric current is established by the constant attempts of the different electricities to neutralize each other and establish an equilibrium, and as the electric force in its endeavor to establish equilibrium, generates the current which decomposes the battery constituents, the current will be generated, so long as the poles of the battery are connected, until either the zinc or the fluid is used up. - [W.B.N.]

The Stenocarpin Fiasco.

We have just received a letter from Parke Davis & Co. which gives the result of their investigations on the nature and properties of gleditschin or stenocarpin. They wrote to Dr. Seward for a sample and he referred them to Messrs. Lehn & Fink of New York, from whom alone he said was it possible to obtain a solution of this alkaloid. Below we give the condensed results of their chemist's (Mr. F. A. Thompson, Ph. C.) work on the subject. He received about a fluid ounce of this solution, it had a sweetish odor and sp. gr. of 1.016 at 59. F., which caused the immediate suspicion of there being present more than two per cent. of any alkaloid. The following is a fac simile copy of the label on the bottle :

<p style="text-align: center;">GLEDITSCHIN $C_{20}H_{21}NO_3$ SO-CALLED STENOCARPIN. A new local Anæsthetic. The salt not being permanent, this 2% solution is recommended. The name Stenocarpin was given this alkaloid by Dr. Seward, its discoverer, because of the close resemblance which the leaves from which he prepared it bear to those of the <i>Acacia Stenocarpa</i>, they have since been identified as belonging to the <i>Gleditschia Triacantha</i>. Recent investigations have proven that in many cases it is preferable to Cocaine, and in ophthalmic diseases superior to Atropin. LEHN & FINK, - - NEW YORK.</p>
--

He sums up his work thus : 1. That the solution, claimed to be a two per-cent of gleditschine, is not what it is represented, and that those introducing it as such are guilty of fraud.

2. That the solution likely contains some coloring agent, differing from that obtained from the drug in which the alkaloid is isolated, or that the color may be due to the presence of an alkaloid, or the substance supposed to be in combination with the cocaine.

3. That the peculiar action of the extracted alkaloid to chemical tests, appearance, taste, and odor, suggest it to be none other than cocaine.

4. That the presence of chloride and sulphate indicates positively that a sulphate of one alkaloid and a muriate of another are present ; and the presence of cocaine being established, which is without doubt in the form of muriate, the sulphate can be accounted for only by assuming that it is in combination with *atropine*, or some other mydriatic alkaloid, such as *duboisine*.

5. The solution contains 6.85 per cent. of alkaloid, calculated as cocaine muriate instead of 2 per cent. of Gleditschine (!) as stated on label.

6. That the dilatation of the pupil of the eye was thought to be more lasting than from cocaine, and less so than from atropine,, indicating the possible presence of some myotic, modifying the action of the mydriatic. Experiencing no dryness of the throat or any hallucinations from the hypodermic injection of the solution. It is possible no *mydriatic* except cocaine is present.

7. That the statement made, that the salt was not permanent, and finding the salt of the alkaloid in this solution quite so, leads one to suppose that *this is not the reason for making such an assertion.*

8. That having had placed at my disposal through the firm of Parke, Davis & Co., several pounds of leaves from which I am unable to produce as yet but a trace of alkaloid giving precipitates with the usual alkaloidal reagents, and which applied to the tongue, produces no sensation whatever, and the existence of a volatile constituent very probable, and a large amount of resinous-like substances having strong astringent properties being present, I question the existence of an anæsthetic or mydriatic alkaloid in *Gleditschia triacanthos*.

Keratin and its Uses.

We merely wish to draw the attention of the profession to this unofficinal compound, as we consider its chief property, insolubility by the gastric fluids, although easily soluble by intestinal juices