

It will thus be seen that Depilagiene has no claims to originality, as practically all the chemical "hair removers" are composed of some form of sulphid. Naturally, the preparation is likely to cause more or less irritation of the skin, the amount depending to some extent on the way in which it is used, and to an even greater extent on the tolerance of the individual skin. Like all chemical depilatories, the use of Depilagiene must make the hair coarse.

## Correspondence

### ANILIN, RATHER THAN NITROBENZENE, AS THE POISON IN SHOE DYE

*To the Editor:*—More than the usual amount of interest seems to be manifested in the cases of poisoning from shoe dye reported from Camp Johnston, and it would appear to be in the interest of our records of the effects of poisons to determine definitely just what was the poisonous agent in this case. Being connected with a company engaged for many years in the manufacture of the several substances which may here come under suspicion, I have had to give some attention to the effects as manifested in workmen. The gross appearance of the blood as described did not impress me as suggestive of poisoning by a nitro compound (nitrobenzene) but as poisoning by anilin. The effects of both of these substances are quite similar, but the nitro compounds are more likely to bring about a destruction of the red cells and cause the blood to present the appearance of chocolate; while anilin is more likely, at least in its early stages, to cause the dark (asphyxiated) condition described. Anilin is quicker in its action and more quickly recovered from, but, more important from the standpoint of the present case, shows a particular predilection to penetrate leather and rapidly poison by skin absorption, so that we have been obliged to take special precautions regarding the shoes worn by anilin workmen. Both agents will cause cyanosis.

Nitrobenzene is widely used as a cheap perfume, and while it was probably present in some proportion in the preparation used by "Toney," I am tolerably confident that a chemical examination will show a much larger proportion made up of anilin, used as a solvent or mordant for the dye which gives the leather its desired color.

W. G. HUDSON, M.D., New York.

Medical Director, E. I. du Pont de Nemours & Co.

### "A NEW TREATMENT FOR THE MORPHIN HABIT"

*To the Editor:*—The article by Dr. C. S. Bluemel on "A New Treatment for the Morphin Habit" (THE JOURNAL, Feb. 22, 1919, p. 552) is based on such unwarranted assumptions that it should not pass unnoticed. Dr. Bluemel states that (1) the "immunity" (tolerance) is probably due to the presence of an antibody or antitoxin in the blood, and that (2) physicians have come to believe that a definite antibody to morphin is formed in the blood, and that the unneutralized antibody is the cause of the withdrawal symptoms.

The first statement, so far as is known, is without any basis of fact. Alkaloids do not produce antibodies. This has been established by many investigators. It would be perhaps more in accord with the facts to say that many investigators have failed to find evidence that anything except protein produces antibodies. In view of this, if Dr. Bluemel has any definite evidence to the contrary he should have stated it in his article. Even when antitoxins are formed, they act only to neutralize toxins. They exert no direct action on the body cells (Ehrlich, Behring) and could therefore not account for the withdrawal symptoms of morphin. Now, it is quite possible that the view of Ehrlich and Behring is wrong. It is also unfair to ask any one to accept their opinion unqualifiedly; but the reputation of these men is such that those who disagree with them should give some basis more adequate than "purely theoretical considerations."

Dr. Bluemel has given no adequate support for his opinion. Physicians have no reason for this belief, and I am of the opinion that relatively few hold such a view.

The result of Dr. Bluemel's treatment is not under discussion, since it is quite possible to get good results from a wrong hypothesis. However, even if we grant his assumption and admit that saline solution will aid such cases, there is no reason for giving this intravenously. This method is much abused and should never be used except for sufficient reason. Salt solution is so rapidly absorbed from the gastrointestinal tract and so devoid of action on the intestine that there is little excuse for giving it intravenously.

HUGH MCGUIGAN, M.D., Chicago.

*To the Editor:*—The article by Dr. C. A. Bluemel on the treatment of the morphin habit is very interesting. The doctor has not given us statistics regarding the ultimate recovery of these patients from the disease of morphinism. This is the important point in the treatment of these cases. From personal investigations I know that withdrawing the drug from the patient is a simple process, provided the patient has been prepared beforehand by a few weeks' observation and preliminary reduction. What we are looking for in these cases is positive results. These are not obtained by one, two or three weeks of treatment, but rather by several months or years of careful observation and conscientious treatment of each individual case.

W. B. REED, M.D., Rochester, N. Y.

### HARMLESSNESS OF GLASS IN DIGESTIVE TRACT

*To the Editor:*—Forty-five years ago I was called to attend one boy, aged 4 years, and two girls, aged 5 and 6, who had eaten corn bread with powdered glass in it. The bread had been prepared to kill rats. I gave an emetic, followed in one hour with boiled potatoes, till the stomachs of the children were filled. In one hour I gave castor oil. The potatoes were expelled by rectum thoroughly mixed with fine glass. The children all recovered without any untoward symptoms.

A. H. W. SULLIVAN, M.D., Miami, Mo.

*To the Editor:*—One morning I was summoned to the house of an aged and infirm patron, who was temporarily caring for two of her orphan granddaughters, who were about 14 years of age; they were cousins and almost inseparable. They were in agony, making effort to evacuate the bowels without success, referring the intense pain to the region of the rectum. On digital examination I found the sphincters closely contracted and a mass of gritty substance. After making sufficient digital dilatation I was enabled to remove several ounces of broken glass from the size of coarse sand to that of grains of corn, followed by some venous hemorrhage, which was of short duration. After a brisk cathartic a prompt recovery followed without untoward results. My curiosity was naturally aroused as to the motive for the ingestion of the glass and the manner in which it was done. The girls informed me that they had been reproved by their grandmother for being out on the streets late at night and had been forbidden to repeat the performance. Considering that life was not worth living if they were to remain housed up without privileges of the gaieties of the outer world, they formed a compact that they would destroy their own lives and would never be separated. The manner of accomplishing it was the puzzling question. They preferred poison, but knew it was impossible to procure any. One of them remembered hearing that feeding a dog with pounded glass incorporated in his food was sure death. They found two beer bottles and took them to a toilet in the rear of the dwelling. With a hammer they pounded the bottles on the floor as fine as they could in separate places, so that each might get an equal amount. They directed me to the place, where I found the unmistakable evidence. One of the bottles was bluish and the other transparent, corresponding with the glass I had removed.

G. J. C. WINTERMUTE, M.D., Celina, Ohio.