Luck (1928). Journ. Biol. Chem., LXXIX, 211.
Mukherjee (1929). Calcutta Med. Journ., January.
Nicloux and Welter (1921). Compt. Rend. Acad. des
Sciences, p. 1490; quoted by Beattie.

RESULTS OF EXPERIMENTS WITH CRUDE OIL PRODUCTS OF THE BURMA OIL CO., LTD., RANGOON, AS LARVICIDE.

By E. S. FEEGRADE,

Military Assistant Surgeon, The Harcourt Butler Institute of Public Health, Rangoon.

"BAUXITE extract," "Distillate Fuel," and "Victoria kerosene"—all proprietary preparations of The Burma Oil Co.—were the subjects of laboratory experiments to ascertain their anti-larval properties and as to which of the three products was most effective in the smallest quantity when spread over a measured surface of water. They were employed side by side with controls.

Larvæ of Aëdes argenteus were the only species obtainable in the numbers necessary for this experiment, and large ones of equal size were usually chosen.

After a series of experiments had been conducted, it was noted that—with a measured quantity of each of the products—the results varied on different days, although the conditions of the experiments were apparently exactly similar in every instance. Eventually it was discovered that the varying results were relative to the varying room temperature. Thus a high room temperature of 90°F, and above diminished the quantities of oil by evaporation and the anti-larval action decreased correspondingly, whereas a lower temperature gave better results in shorter periods.

The ultimate findings as to the minimum amount of each oil-product required to destroy Aëdes argenteus larvæ were based on experiments carried out with 1,760 c.c. of tap-water, with a surface measurement of 6½ inches by 3½ inches and 4 inches deep, and a temperature varying from 85°—88°F. from 10 a.m. to 3 p.m. In this case the addition of 0.1 c.c. of "Victoria kerosene" killed the first larva in 40 minutes, and the last of 10 in 3 hours and 20 minutes; whereas with the same quantity of "Distillate Fuel" the first larva died in 30 minutes and the last after one and half hours; and with "Bauxite extract" the first larva succumbed in 20 minutes and the last after one hour and 10 minutes.

Smaller quantities than 0.1 c.c. of any of these three products gave unsatisfactory results, destroying some larvæ in longer periods, but not affecting others for three or four days, whilst in some instances pupation occurred.

Hence "Bauxite extract" stands first in the order of efficiency, then "Distillate fuel," and lastly "Victoria kerosene."

Further observations regarding the relation of temperature to experiments on such lines are necessary in order to arrive at more definite conclusions, so I propose to undertake these later on in the coldest and hottest seasons in Rangoon.

A Mirror of Hospital Practice.

A CASE OF MEDICO-LEGAL INTEREST.

By M. UMAR,

Bijnor, U. P.

A MAN from Kiratpur, district Bijnor, Bania by caste, was sent by the court for examination of his injuries on 13th February, 1929. He said that he was hit with a *lathi* (stick) on Monday, 11th February, 1929, afternoon. He had the following injuries:—

- (1) A contusion six inches long and one inch wide just behind the right ear.
- (2) A contusion over the upper part of the left arm eight inches long and two inches wide.

These injuries at the first glance appeared to be trifling. However, he further stated that blood came out of his right ear, nostril and mouth, and that he became unconcious when he received the blow. Although lying is very common in this country, I examined the right ear which was full of blood. Unfortunately it was a cloudy day, and I had to use artificial light; even then I could only see with difficulty. There appeared to be a small rent in the tympanum of which I was doubtful. Next day it was bright and I examined him in the sun, after washing the ear well; the condition was as shewn below:—

Condition on 13th February,



Congested area, spotted black.
Blood was oozing from the shaded area.

Now there are two causes of this injury, one direct and the other indirect. The injury to the tympanum was due to an indirect cause. Since he became unconcious from the blow there is probably a very fine fracture of the middle fossa of the skull, probably involving the Eustachian tube.

My reasons for inferring a fracture of the middle fossa is that the bleeding was probably from the Eustachian tube, which would allow blood being discharged from all three points, ear, nose and throat.

In this case the rupture appeared to be in the postero-inferior quadrant of the drum and it is sufficient to consider the injury as *grievous* on this account alone.

A CASE OF VOLVULUS OF THE LARGE INTESTINE AT THE SPLENIC FLEXURE.

By T. S. DAKSHINAMURTHI, L.M.

Sub-Assistant Surgeon, Alipuram Jail Hospital, Bellary Cantonment, Bellary.

A convict Moplah, aged 66 years, was admitted to the jail hospital at 10 a.m., on 29th October, 1928, for colicky pain in the abdomen with a history of not having passed a motion within the previous 24 hours. The pulse was normal and 72 per minute. There was neither rigidity nor distension of the abdomen. He was given an ounce of castor oil at once which did not work his bowels. At 11 a.m. a turpentine enema was given with no result. By about 2 p.m. the abdomen was slightly distended. Discomfort increased and pain was localised to the upper abdomen. There was no marked rigidity. By 5 p.m. the abdomen was very much distended. There was definite rigidity and tenderness of the whole upper abdomen. The patient was feeling acute discomfort and was restless. Distension was more marked on the right side and the distended coil of the intestine could distinctly be felt. There was acute obstruction in the intestine with no passage of stools and flatus. His temperature was 98.8° and pulse full and 46 per minute.

The patient consented to the immediate operation proposed by the medical officer. He was anæsthetised and the abdomen was opened by a vertical incision 5 inches long in the upper abdomen about 1 inch to the right of the middle line. The transverse colon, which was much distended and congested, presented itself through the wound. The obstruction was, therefore, located below that portion. On search, a twist of the large intestine at the splenic flexure was discovered, the lower end of the loop lying over and across the upper one. The twist was released. The accumulated gas was expelled through the anus by careful pressure on the distended coil of the intestine and the abdomen was closed. The operation took only ten minutes and was done by the medical officer. The patient made an uneventful recovery.

The interesting points in the case are the following, viz:—

- (1) The comparative rarity of a volvulus of the large intestine at the splenic flexure. It is stated in the textbooks that volvulus of the large intestine is common at the sigmoid flexure and the cœcum.
- (2) For his age, the patient took choloroform very well.
- (3) The necessity for surgical interference as early as possible in all cases of acute abdomen, in spite of age and other conditions of the patient, as surgery alone has a chance of giving him life.

My respectful thanks are due to my medical officer Dr. T. J. Gibson, I.M.D., who kindly permitted me to publish these notes.

TIGER BITES AND THEIR TREATMENT.

By K. G. KHANDEKOR, M.B., B.S.

Guna, Gwalior State.

RECENTLY I had to treat a dozen patients who had been mauled by tigers or leopards. It was not possible to treat all of them with serums, and iodine injections were only of limited use. So I had to fall back on some local application, and compresses of saturated solutions of magnesium sulphate were found of very great use. Pathologically, injuries caused by the teeth of the claws of these animals are of the nature of cellulitis. Wet compresses were applied over the inflamed parts and cavities containing pus were dressed with gauze soaked in solution till the superficial inflammation had subsided (it usually took five or six days). Then no gauze was introduced into them, and the cavities healed promptly without any more discharge.

The temperature of the patients did not rise appreciably.

One patient was mauled by a tiger and his whole body was in a condition of surgical emphysema; he had no fracture of the ribs; the condition was probably due to gas-producing organisms. I was afraid to give him any intravenous injections as his veins could not be steadied and there was a danger of carrying some of the germs into the circulation along with the needle. The emphysema completely disappeared within four days by dressing the injuries with the solution of magnesium sulphate.

A FURTHER NOTE ON THE ACTION OF HÆMOPLASTIN.

By KAMAKHYA PROSAD LAHIRI, I.M.S.,

P. O. Bera, Dist. Pabna.

About four years ago, in April, 1925, a short contribution from the pen of the present writer appeared in this journal, under the caption "Hæmoplastin in Hæmorrhage." In this he reported favourably on the subcutaneous use of this hæmostatic in two cases of obstinate bleeding.

The patient who had uterine bleeding is still alive; she has had no further trouble from that cause. The patient who suffered from hæmorrhagic piles is also alive; he had a relapse of bleeding last year and another in the year previous to that. On both these occasions he was cured with hæmoplastin. Considering the unfavourable nature of the family history, he