what does it consist? Why are some persons prone to asthmatic catarrh and others not? Why does the disposition run in families? What is the bond which in so many cases connects the several diatheses of asthma, eczema, and gout?

For the solution of such problems as these, and for the advancement of all medical learning, may a succession of men like Harvey and Willis never be wanting to our venerated College.

IS PETROLEUM EMULSION OF ANY NUTRITIVE VALUE?

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THERE can be no doubt that in recent years petroleum emulsion has crept into use as a substitute for cod-liver oil in the case of patients who are unable to take the latter. Now, petroleum belongs to the paraffin series—that is to say, to a set of substances which are characterised by the great opposition which they offer to chemical change. One would not, therefore, expect on *a priori* grounds that petroleum would be capable of assimilation in the body. In order to put the matter to practical test I recently carried out some experiments on the absorption of petroleum emulsion by man, the results of which entirely confirmed the suspicions which one had entertained on chemical grounds, and lead to the conviction that petroleum is of absolutely no use at all as a substitute for cod-liver oil. It is the object of this paper to describe these experiments and the conclusions to be drawn from them.

I employed a well-known and widely advertised emulsion of exceedingly pure petroleum. It was found that 30 c.cm. of it, when mixed with charcoal and evaporated to dryness, yielded on extraction with ether 7 grams of semi-fluid petroleum; 30 c.cm. represents about 3 dessertspoonfuls, which is the usual daily dose of the emulsion in question. I next proceeded to administer this dose to a healthy man with the object of ascertaining how much petroleum one could recover from the fæces. In the first experiment the subject was placed on a constant diet containing a moderate amount of fat. The fæces were collected daily, mixed with animal charcoal, and evaporated to dryness. The product was then extracted with ether in a Soxhlet's apparatus and the extract weighed. The results are contained in the following table:

First Experiment.

	Weight of Ether Extract.
Total fæces of three days without petroleum	7.1 grams.
Total fæces of three days on 30 c.cm. petroleum emulsion per day	32.7 ,,
Difference ...	25.6 ,,

That is to say, the administration of three dessertspoonfuls of petroleum emulsion daily had increased the ether extract of three days' fæces by 25.6 grams, although the diet was exactly the same as on the three previous days. The appearance of the extract was also quite different for the two periods. That of the first three days was solid and waxy, while that of the three petroleum days was semifluid in consistence.

In order to recover petroleum free from fat the ether extract was saponified by boiling with alcoholic potash solution. The residue was diluted with water, shaken up with ether in a separation funnel, the ether evaporated, and the residue weighed. The total 32.7 grams yielded on this treatment 21.6 grams of semifluid petroleum. Now 7 grams of petroleum had been administered on each day, so that 21 grams had been given, and 21.6 were recovered. The apparent excess found was probably due to the presence of traces of soaps.

In the second experiment no attempt was made to regulate the diet. Thirty cubic centimetres of the emulsion were administered on one day, and the fæces of the three succeeding days extracted with ether, and the extract saponified as above.

Second Experiment.

	Ether Extract.
First day (no petroleum)	3.5 grams.
Second day ,, ...	4.1 ,,
Third day (30 c.cm. emulsion)	4.3 ,,
Fourth day (no petroleum)	7.6 ,,
Fifth day ,, ...	6.9 ,,

On saponification, the extract of the fourth day yielded 4.5 grams of petroleum. The extracts of the third and fifth days yielded together 2.6 grams. The total amount of petroleum recovered was thus 7.1 grams, while the amount contained in the 30 c.cm. of emulsion given was 7 grams. The results of this experiment, therefore, entirely confirm those of the first.

From these experiments it may reasonably be concluded that petroleum is not absorbed in the human intestine and I consider, therefore, that it can in no wise be regarded as a food or a substitute for cod-liver oil.

Nor do I suppose that petroleum has any remote action, say, upon the lungs. It is conceivable that if crude petroleum were employed, some of the volatile substances contained in it might enter the blood and be excreted by the mucous membrane of the air passages, but the purer the petroleum used the less chance is there of any such occurrence.

Whether petroleum may have any value as a local application in intestinal diseases must be left undecided. One can imagine that there may be conditions of the intestinal mucous membrane in which the administration of petroleum might be of value in the same way as the application of vaseline to the skin, by forming a sort of pellicle on the intestinal surface.

In one sense, also, it may be regarded as an artificial intestinal mucus, and it might in that way have some value in certain forms of constipation. It is also worth considering whether it might not be a useful vehicle for the administration of intestinal antiseptics. Carbolic acid dissolves in it, and if the petroleum prevented the absorption of the acid it would also bring the latter into intimate mixture with the intestinal contents, and act as a sort of internal "carbolic vaseline"; but that part of the subject would require special investigation by experiment. My only object at present is to point out that petroleum, even when given in the form of emulsion, is not absorbed at all, and as a consequence can have no nutritive value.

CARCINOMA OF THE TONSIL.

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CASES of primary epithelioma of the tonsil are comparatively infrequent, but they are not so rare as was at one time supposed. The following case seems to me to have some points of interest.

Mrs. W., aged 60, consulted me in June, 1898. There was a well-defined swelling about the size of a pigeon's egg at the angle of the jaw, and extending up behind the ramus on the right side. On examining the pharynx, the right tonsil was found enlarged and its surface ulcerated; the uvula was pressed upwards and to the opposite side, and the right anterior pillar and adjoining surface of the soft palate were hyperæmic and swollen. There was no involvement of the tongue.

She gave the following history: In March a swelling at the angle of the jaw on the right side was noticed, and shortly afterwards she accidentally discovered that the right tonsil was inflamed and ulcerated. There was no difficulty in swallowing and no complaint of pain. She stated that though never a strong woman, she had suffered from no definite ailments. It may be noted that her mother died of "cancer of the breast," and a brother died of a "tumour on the right side of the chest" at 40 years of age.

As the swelling was regarded as malignant, a portion of the tonsil was removed and sent to the West of Scotland Clinical Research Laboratory, where the diagnosis of its malignancy was confirmed.

The report states: "Sections were cut vertical to the