Four of Leclanché cells are usually enough, if the battery is in good order; but the current must be strong enough to decompose water with facility.

It seems not to be advisable to destroy very many hairs in the same lid at a sitting, for the resulting swelling is sometimes considerable. The advantages which I claim for this method over epilation, snaring, or the actual or potential cauteries, are these.

1. Any individual hair can be destroyed without injuring those beside it.

2. The hair can be got rid of at once and for ever.

3. Hairs of any length, strength, or position, can be treated.

4. By its early use, it will render unnecessary many of the more formidable operations on the lids, besides saving the patient much misery.

In cases where a very large number of hairs are misplaced, or where entropion exists, it is inapplicable, and some of the numerous plastic operations should be preferred.

The greatest disadvantage, as far as I have seen, is, that it is very painful for the time.

I have now been practising this method for over four months, at St. Mark's Ophthalmic Hospital, during which time I treated 120 ciliae by electrolysis, and had some of the patients under constant observation for a month, and at intervals since, and have been able to observe no recurrences; and have been so pleased with the results obtained, that I have ventured to bring the subject before the Ophthalmological Section of this Association, feeling sure that to those who, like us in Ireland, have a large number of cases of trichiasis to treat, it will prove a valuable help; and that by its means many an one who had been for months a regular attendant for epilation to the *clinique* may be permanently cured.*

Four months may seem too short a time to have tested the permanency of the cure; but, while freely admitting this, I must urge that by no other method that I am acquainted with have hairs been for so long kept from showing; and, from the nature of the case, there is every reason to expect that the vitality of the follicles have been quite destroyed, and consequently no return is possible.

If applicable for the ciliae, electrolysis should be equally applicable for the destruction of hair-follicles elsewhere, in moles, or hairy-faced females.

The method can, however, only be regarded as on its trial; but, so far, the results have been such as to encourage the most sanguine hopes, and to invite a much more extended trial.

ON THE ABSORPTION OF CERTAIN SALTS FROM THE ALIMENTARY CANAL.

By MATTHEW HAY, M.D.,

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In a series of papers on the Action of Saline Cathartics, which are at present appearing in the *Journal of Anatomy and Physiology*, I have drawn attention to a remarkable peculiarity in the absorption of sulphate of soda from the alimentary canal. I there state (vol. xvi, p. 568), as the result of a number of experiments—in which a purgative dose of the salt was administered to fasting cats, and the animals killed at various intervals afterwards, and the quantity of salt recoverable from the alimentary canal estimated—that, during the first hour after the administration of the purgative, the salt is rapidly absorbed, until nearly one-half of the whole dose (five grammes) disappears from the canal, whilst during the next hour the greater portion of the absorbed salt returns to the canal. The quantity of the salt was estimated from the quantity of sulphuric acid recoverable, which was precipitated in the usual way by means of barium sulphate from an acid solution of the ash of the dried contents of the canal. I have ventured to explain the peculiar course of the salt by suggesting that the rapid absorption occurs in the small intestine, and the excretion in the large intestine. A more detailed explanation will be found in the papers referred to.

Since these experiments were made, I have recently instituted others for the purpose of ascertaining if other purgative salts behave in a like manner to sulphate of soda, and if the base as well as the acid of each salt be similarly absorbed and excreted; for, as mentioned, it was only the acid of the sulphate of soda which I estimated. The other

salts employed in the present experiments were the sulphate of magnesia the phosphate of soda.

The results of the additional experiments with the sulphate of soda showed that, although the acid is rapidly absorbed during the first hour of the action of the salt, the base is not. For example, after the administration of five grammes of sulphate of soda to a cat, which was killed one hour afterwards, there were recovered from the contents of the alimentary canal, mixed with an infusion of the canal-wall, 2.544 grammes of sulphate of soda as reckoned from the sulphuric acid present, and 4.877 grammes of the salt as reckoned from the soda present. Other experiments performed in the same manner yielded like results. If the cat were killed two hours afterwards, nearly four grammes of the salt were recovered, as estimated from the acid, and about four grammes and three-quarters, as estimated from the base. After a longer period, the acid and base gradually became less.

The experiments with sulphate of magnesia yielded much the same results as those with the soda-salt. The acid rapidly disappeared from the canal during the first hour after the administration of the salt, and even to a greater extent than in the case of the sulphate of soda. As also with the latter salt, the acid returned to the canal, but not quite so rapidly as the acid of that salt. At the end of the second hour, there was hardly more of the acid in the canal than there was at the end of the first hour; but, by the completion of the third hour, the quantity had considerably increased. Meanwhile, the base or the magnesia was very gradually undergoing absorption, and never at any time during the first few hours after the administration of the purgative, was there evidence afforded of the base having pursued the same peculiar course of absorption and excretion as did the acid.

The following tabulated arrangement of these experiments with the sulphate of magnesia clearly brings out these facts. Five grammes of the salt was the dose in each case, and the cats were nearly of equal weight.

Experiment.	Killed after Administration of Salt.	Acid and Base Recovered from Alimentary Canal, calculated as Mg. SO ₄ 7 H ₂ O.	
		Acid.	Base.
		Grammes.	Grammes.
A.	40 minutes	3.132	4.966
B.	65 "	1.852	4.390
C.	80 "	2.001	4.240
D.	2 hours	2.065	4.009
E.	3 "	3.531	3.421

In my paper on the Action of Saline Cathartics, I pointed out that one-fourth part or less of a purgative dose of sulphate of magnesia will, when injected into the circulation of a dog or a cat, kill it; and I, at that time, remarked that, if this salt were absorbed into the blood in the same manner and to the same extent as the sulphate of soda, it was very strange that it did not exert its toxic action. I did not then know that the acid was absorbed, whilst the base, for the most part, remained in the canal, or was absorbed only very slowly. The present experiments, therefore, offer a very satisfactory explanation of the difficulty I formerly experienced. The salt is split up in the canal, and the basic or toxic part of it enters the blood very gradually, and not more rapidly than it can be excreted by the kidneys.

The remaining experiments were made with the phosphate of soda, to observe if the phosphoric acid of this salt might behave in the same way as the sulphuric acid of the sulphate. The experiments were only two in number, in one of which the cat was killed after one hour, and in the other at the end of two hours. In both the quantity of phosphoric acid recovered from the alimentary canal and its contents was large, and did not exhibit any evidence of the same primary rapid absorption as of the sulphuric acid. The phosphoric acid was, however, more reduced in quantity than the base, and it is probable that, to a certain extent, the phosphate undergoes decomposition in the canal.

How the splitting-up of the sulphates in the intestines is effected, and in what combination the acid passes into the blood, is beyond the scope of the present communication.

VACCINATION.—Mr. T. H. Hughes, Public Vaccinator of the Ombersley district of the Droitwich Union, has received (for the fourth time) the Government grant for efficient vaccination in his district.

* Since writing the above, I have continued to use electrolysis for the cure of partial trichiasis with equally satisfactory results; I have now treated a very large number of hairs by this method, and can therefore speak with more authority; I have been much pleased to find that the method has since been adopted by several Ophthalmic Surgeons in England and Ireland.—A.B., Dec. 12th, 1882.

† Read in the Section of Anatomy and Physiology of the Annual Meeting of the British Medical Association in Worcester, August, 1882.