susceptible of irritation, but that very probably it is the centre from which the expulsive action of the uterus takes its origin, the further inference being that if a placenta be unduly adherent when it happens to be located at the fundus, or that a sessile tumour grew from the fundus, the uterus is stimulated to get rid of what has become a foreign body, and, failing to detach, this, becomes inverted in consequence of its own efforts.

Long before I retired from practice I became convinced that the late Dr. Robert Barnes, who was one of my most highly esteemed friends, was mistaken when, on the authority of Rokitsansky, he stated that the fibres of the uterus at the placental site are paralyzed and do not contract equally with the uterine fibres, and that so inversion occurs; nor can I agree with him that the "fundal zone" is the natural site for placental attachment. The number of times I have introduced my hand to remove an adherent placenta were very numerous, and in not one of these was the placenta situated at the fundus uteri.

I should be glad to think these remarks of mine may call the attention of practitioners to the subject of the causes of inversion of the uterus, and that the particulars of such cases as may be observed be published.

REFERENCE.

¹ *Dublin Journal of Medical Science*, vol. lxxii, 1881.

THE ABSORPTION OF OINTMENTS.

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In the selection of a topical application for use in cutaneous disorders the most important factors to be considered are those of protection and penetration. It is not a difficult matter to find an agent which fulfils the first requirement, but the last is a much more difficult proposition.

Until within the last few years, experiments made with the view of testing the rapidity with which substances were absorbed by the skin were confined for the most part to repeated quantitative examinations of the various excretions, especially the urine, immediately following the application of the medicament under trial. Aubert incorporated atropine in various ointments, and, after rubbing them on the surface of the skin, had his patients exercise. The perspiration from other parts of the body was then collected and examined. Another method consisted of the microscopic inspection, after sectioning, of skin which had been treated with mercurial salves for varying periods prior to excision. The minute globules of metal served as penetration indicators. Some time ago, while visiting Dr. P. G. Unna's laboratory in Hamburg, I undertook, at his suggestion, a series of experiments along this line, guinea-pigs and white rabbits being used as subjects for the tests.

In order to get more direct results, various tissue stains, in the form of aniline dyes, were employed. These were thoroughly mixed with diverse vehicles and applied to the bare skin, the hair having been carefully clipped off. In some instances friction was used, in others the fluid or ointment was simply painted or smeared on. After the lapse of a certain period, varying from fifteen minutes to several hours, the patch was excised under anaesthesia.

The pieces of tissue were at once blocked, frozen, and out, the sectioning being done in a direction parallel with the hair shafts and from below upward, in order to prevent the stain from being carried further into the tissues by the microtome blade. For the same reason the knife was cleaned with ether after each stroke. The sections were immediately placed in a filtered mixture of honey (10 0), glycerine (20 0), and water (70 0), later being mounted and examined in the same media. The use of vaselined rings on the slides prevented evaporation if the specimens could not be examined at once. Of the great number of different methods tried the one here given has proved the most satisfactory.

Only a few of the aniline dyes answered the required purpose. For oily and ethereal vehicles I have found scarlet (scharlach) best, and for spirituous ones, fuchsin.

The accompanying table represents the comparative

values in penetrative power of the substances most commonly employed.

Substance.	Stain.	Duration of Application.	Penetration.
Acid. carbolic. ...	Fuchsin	12 hours	Slight.
Alcohol	"	3 hours	Very slight.
Ol. olivae	Scarlet	4 hours	Considerable. Glands well tinted.
Ol. santali	"	4 hours	Fairly good.
Lanolin	"	5 hours	Slight.
Lanolin 1.0 } Ol. olivae 1.0 }	"	3½ hours	{ Good. Glands quite pink.
Ol. lini	"	4 hours	Slight.
Goose grease	"	3 hours	Excellent. Gland deeply stained.
Cetaceum	"	4 hours	Very slight.
Lanolin 9.0 } Cedar-wood oil 1.0 }	"	3 hours	Quite good.
Petrolatum	"	4 hours	Very slight.
Petrolatum, with friction	"	4 hours	Considerable.
Petrolatum 9.0 } Cedar-wood oil 1.0 }	"	3 hours	Fair only.
Adeps	"	3 hours	Excellent.
Adeps benzoïnatus ..	"	4 hours	Very good.
Adeps 9.0 } Cedar-wood oil 0.1 }	"	3 hours	{ Excellent. Gland well stained.
Ichthyol	"	4 hours	Fair only.
Ichthyol 2.0 } Ol. olivae 8.0 }	"	4 hours	{ Good. Glands well tinted.
Suet	"	3½ hours	Fair.
Ung. aquae rosae ...	"	5 hours	Fair only.
Ung. aquae rosae 9.0 } Cedar-wood oil 1.0 }	"	4 hours	{ Much better than ointment alone.
Ol. terebinthinae ...	"	3 hours	Considerable.

CONCLUSIONS.

Lard, simple or benzoïnated, and pure goose grease are the most quickly absorbed of all the substances tested. Petrolatum is a poor penetrant unless applied with friction. Lanolin, alone, is absorbed very slowly; mixed with a more fluid material, as olive oil, it readily enters the skin. The addition of a small amount of cedar-wood oil to an ointment considerably increases the rapidity of absorption.

ON RECENT ADVANCES IN THE SURGICAL TREATMENT OF SYPHILIS.*

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It is useful to review our knowledge from time to time, though it would seem difficult at first sight to tell anything new about syphilis. Its history has been studied for a longer time and with greater care than that of any other disease, because its sudden appearance in Europe occurred at a time when printing was becoming general and was coincident with a general revival of learning. The earliest records of the disease, therefore, were made by observant men capable of giving a detailed account of a condition which appeared to them to be new, whilst its occurrence as a pandemic drew immediate popular attention to the affection and called forth many references to it from the pens of non-medical writers. The interest thus aroused led surgeons to devote a special portion of their treatises to the subject of venereal disease, and when other subjects of equal importance were dismissed in the textbooks in a few paragraphs, venereal disease was often treated of at inordinate length. An enormous mass of literature has thus grown up around the subject, a mass which it is impossible now for any one to master, merely

* Abstract of a paper read at the annual meeting of the Medical Society of London, May 11th, 1908.