employment undesirable. Orthoform is sufficiently anæsthetic, its action is prolonged, and it is non-toxic, and therefore seems to supply the good qualities of cocaine without its drawbacks.

The drug has been tried in three cases, and confirms this view. In the most marked of the three (that of a man of thirty-four with a six years' history of frequent and serious hydrorrhœa, paroxysmal sneezing, etc.) a single insufflation of orthoform not only cut short a crisis, but seems to have cured the trouble altogether. The crises which used to occur every week or ten days, and to continue for something like a week, night and day, have completely ceased since the single application made nearly three months ago.

New Instrument.

M. FURET showed a punch forceps for removal piecemeal of hypertrophied lingual tonsils. The instrument acts well, and gives much less pain than the cautery. *Ernest Waggett.*

ABSTRACTS.

DIPHTHERIA, &C.

Vincent.—On a Particular Form of Diphtheroid Angina. ("Angines à Bacilles fusiformes.") "Arch. Intern. de Lar., O., R.," Jan., Feb., 1898.

It is well-known that a variety of micro-organisms can develop on the surface of the pharyngeal mucosa, and give rise to pseudo-membranous lesions more or less resembling those of diphtheria. A diagnosis can always be made by bacteriological examination. The particular variety now under discussion appears to be fairly common, but does not seem to have met with special recognition. Bernheim, in his paper on anginas and ulcero-membranous stomatitis, describes a microbe resembling that which the author has studied, and this fact has induced him to publish the present work. Clinically, this diphtheroid angina affects, as a rule, one tonsil only and the neighbouring pillar. At the onset the tonsil is covered with a white, or grey, thin and soft pseudo-membrane, which is easily detached. Below it the surface is eroded and bleeds readily. The edges of this spot of membrane are irregular, and appear to be more adherent than the central parts. After removal regrowth is found next day.

In serious cases the membrane covers a ragged ulcer. About the third or fourth day the membrane is found to be thick, soft, and almost caseous superficially, the breath is disagreeable or feetid, and the mucosa of the adjoining parts is cedematous and red. Dryness of the throat and dysphagia are complained of. The submaxillary lymphatic glands are but little affected, except in severe or neglected cases. Suppuration in the glands has not been observed. Febrile symptoms are always present though often slight. Temperature frequently reaches 38.5° or 39° C.; this, however, is reduced almost to normal, when local antiseptics are employed, as early as the third day, though the false membrane persists. About the eighth or tenth day the tonsil clears up, and repair of the ulcerated surface is rapid. Sometimes membrane is seen as late as the tifteenth day. Unlike

what is so often seen in diphtheritic angina, the false membrane does not spread to the opposite side.

Diagnosis must rest upon microscopic examination of the exudate. When stained with dilute Ziehl's fuchsine, or with thionine, two species of micro-organisms are always found predominating.

I. A peculiar bacillus, easily recognized from its length (ten to twelve μ), bulged in the centre and tapering off at either extremity.

2. A slender spirillum, more difficult to stain, and closely analogous to that found in tartar, normal saliva, etc. This spirillum is often extremely abundant, but does not bear the same relation to the angina as the bacillus, which has sometimes been almost the only micro-organism present. The development of the spirillum would seem to be dependent on the presence of the latter, and is sometimes found associated with streptococci also. The peculiar bacillus the author has named, from its shape, "bacille fusiforme." Short torms occur—sometimes united in pairs, end to end. Extra long forms also occur ; and they may even be found as filaments, which display their identity by the taper extremities and granulated protoplasm. The bacillus is especially abundant at the onset of an attack, and is found either uniformly distributed over the field of the microscope or collected into groups and confluent masses, and even in bundles, with a radial arrangement of the separate elements.

Involution forms are often seen; and it is very common to find vacuolated individuals, the clear, rounded spaces (to the number of two or three) not staining with the usual spore stains. In the filamentous the vacuoles are numerous; and in some of the involutious forms the centre is much swollen and takes no stain.

The "fusiform bacillus" is not stained by Gram's method; and the same applies to the associated spirillum. The author has failed to obtain a culture of the bacillus, after trying a number of media both in air and in vacuo. Inoculation of the faucial and buccal mucosa in animals has been negative.

The bacillus seems to exist in small numbers on the surface of the tongue and tonsils in healthy persons. The characteristic form, large size, non-coloration by Gram, and impossibility of culture, differentiates this bacillus from that of diphtheria; and it is interesting to note that these peculiarities, together with the association with a spirillum, offer a certain resemblance to those of the bacillus of hospital gangrene (wound diphtheria) described by the same author.

The most successful clincal results would seem to follow application of tincture of iodine, with boric gargles. The disease always clears up without complication. *Ernest Waggett.*

MOUTH, &C.

Armstrong, G. E. - Excision of Tongue. "Montreal Med. Journ.," Jan., 1898.

In June, a man, age not given, presented himself with a small epithelioma of the tongue on the right side, opposite the molar teeth. He declined operation. In October he returned. Extensive infiltration had taken place. The whole floor of the mouth was involved. Had constant pain, and begged to have his tongue removed. He could not speak with distinctness. Dr. Armstrong performed tracheotomy and excised the tongue at the one operation. As the lymphatic glands of the neck were very much enlarged, the lateral incision of Kocher enabled him to remove them as well as the maxillary. So far the patient has done well.

This was unavoidably a late operation. The author lays stress upon the