remember, however, that, as an operation, it is still in the experimental stage.

This operation of castration brings us to the furthest limit of advance in this branch of surgery, and I will, in a few words, state the conclusions which can, I believe, fairly be drawn from a general review of the subject:—

1. Now, as formerly, the large majority of cases require no treatment except regular catheterism.

2. For some, however, this is insufficient, and we may then resort to supra-pubic prostatectomy if the patient seems to have sufficient strength.

3. For the very old and feeble there is at present only one operation recognised by surgery—*i.e.*, perineal drainage.

4. But now it seems possible that we may have in double castration an alternative measure. The results already obtained make us hopeful; but I think at present Irish surgery can afford to wait.

It only remains that I should express my thanks to many kind friends for the extensive assistance they have given me; and, in conclusion, I wish to thank you, gentlemen, for your courteous attention to my Address, which has, I fear, attained a length out of proportion to its interest.

ART. VII.—*Cocain Poisoning.** By J. B. MATTISON, M.D.;
Medical Director, Brooklyn Home for Habitues.

It is “ancient history,” more or less, since the writer began to present the record of toxic effects from cocain.

During the nearly nine years past dozens of deaths and hundreds of non-fatal cases from untoward effect of this drug have been placed before the profession, so that one is at a loss to know whether he who, at this late day, says, “It has hardly been reasonable to call it a poison in any ordinary quantity,” is ignorant of this toxæmia, or is blinded by a feeling in its favour that prompts him to question this fact, and prevents him counselling that caution in its use which prudence undoubtedly demands.

A Boston oculist, Dr. J. A. Tenney, writing recently about “mishaps with cocain,” used the language we have quoted, and, in so doing, may have intended to limit his statement regarding its non-toxic effect to his special field. If so, he might better have

* Read before the King's County (U.S.A.) Medical Society, October 16, 1894.

been more explicit, for, surely, it was not wise to disclaim, in a general way, its power as a *poison*—for *poison it truly is*.

In November, 1888, at a meeting of the New York Neurological Society, Dr. William A. Hammond, speaking of cocaïn, said “he did not believe any dose that could be taken was dangerous.” Before that meeting ended, the writer challenged such a dangerous statement, and warned the members against accepting it; and during the next year presented such convincing proof that Dr. Hammond was wrong as to impel the *British Medical Journal* to assert, editorially—“If it were needful to produce more proof of the unsoundness of Dr. Hammond’s opinion, Dr. Mattison has effectually done this.”

Dr. Hammond has lived to see the day that he regrets, quite likely, having expressed such dangerous doctrine. He certainly has admitted his error; for, in discussing my paper on “Cocaïn Inebriety,” read before the District of Columbia Medical Society, Washington, Christmas Eve, 1891, he frankly confessed that he was wrong, and avowed that *he* had nearly killed a patient with cocaïn.

No one can tell what mischief went in the wake of his expressed disbelief in the toxic power of this drug. Had it come from some obscure practitioner it would have passed almost unnoted; but with the weight of such authority as Hammond’s professional prominence gave it, it was all the more dangerous.

The first lethal case of cocaïn poisoning was due to the hapless surgeon’s reliance on its asserted use in large amount without harm. This case had a doubly tragic ending; for, not only did it cost the life of the patient—a young woman—but the unhappy surgeon, overcome by regret or remorse, committed *felo de se*.

What the outcome, fatal or non-fatal, all unrecorded it may be, of a like reliance on Dr. Hammond’s statement?

Dr. Tenney seems to think that the taking of 18 grs. of cocaïn, subcutaneously, in three doses at short intervals, without death, which was Hammond’s claim, proves it “hardly reasonable to call it a poison.” We do not agree with him. It simply proves an exception to a rule, just such as obtains along numberless other lines, and in view of what history has since given us concerning cocaïn poisoning, it proves that it was a foolhardy affair, for it might have cost the venturer his life. Many a man, less a Hercules than Hammond, would have been promptly “gathered to his fathers.”

There is little question that the earliest reports on cocaine roused a fervour in its favour that led more than one to commend it with a zeal not tempered by that caution which prudence demands. Others, while not lauding it unduly, were inclined to disparage the warning note that was sounded early against it. I well recall a member of the Neurological Society, who expressed himself as much pleased with Dr. Hammond's assertion, regarding the non-harmful nature of cocaine as one likely to lessen an unfounded prejudice against a valuable drug.

With the deadly record that has since been presented, it is quite probable that member (Leonard Corning) has changed his opinion, for he must now know the expressed fear of cocaine had a foundation on fact.

History has repeated itself along lethal lines as regards cocaine so often that it really seems surprising that anyone at this day should question its power for harm. It may not be known to all that cocaine has killed in smaller dose than morphin—but that is a fact. It may not be known to all that cocaine has killed in quicker time than morphin—but that is a fact.

Autumn before last, I reported, for the first time, through the courtesy of Dr. George B. Cushing, now of Wheeling, Va., this case:—Strong man walked into Bellevue Hospital, suffering from urine retention. Catheter disclosed stricture. One drachm of a four per cent. solution of cocaine was thrown into urethra. Almost at once patient became greatly excited, and in a few seconds went into convulsions, so violent that it required the combined strength of doctor and nurse to hold him on the table. Amyl was promptly used; no reaction; in four minutes the man was dead.

This case, for which I thank Dr. J. E. Lumbard, New York City, is now first reported:—Man, aged 25, entered Manhattan Hospital, complaining of two days' urine retention. Catheter revealed traumatic stricture, due to a $2\frac{1}{2}$ -inch sewing needle put in urethra by chum, during a drunken frolic. Twenty minims of a four per cent. cocaine solution were injected into urethra. Immediately patient went into convulsions, and, despite every effort, died. Autopsy in each case showed intense lung congestion.

Very recently two deaths from cocaine—within a fortnight of each other—have been noted, and are now first reported.

On the last day of last month, a young woman visited a "complexion artist"—so called—in Chicago, to have a facial blemish removed. Sham electricity was used, it being really a

dummy battery, one sponge of which, saturated with a strong solution of carbolic acid, was held to the affected part, with the result of causing great pain. To relieve this, a four per cent. solution of cocaïn was freely applied. In a few minutes, the woman became excited, said she felt strange, walked to a window, and fell dead. No autopsy.

Four days ago—Friday last—a man, aged 26, entered the office of a Jersey City physician, to be operated on for a rectal fistula. Twenty minims of a four per cent. cocaïn solution were injected hypodermically for anæsthesia. No effect ensuing in ten minutes, twenty minims more were injected. In three minutes the man became unconscious and convulsed. One minute later he was dead. No autopsy.

The evidence to prove cocaïn a poison is now so ample that no excuse will avail to exonerate the doctor who, not heeding the lesson taught by the gruesome record, fails to use it with the care its toxic energy demands.

It is a drug powerless for good in certain conditions; but its power for ill must never be lost sight of, if one would conserve the best interests of those on whom it may seem wise to use it.

TOLYSAL OR SALICYLATE OF TOLYPYNYLL.

THE pyrexia is not affected by the first gramme dose of tolysal, but one hour after the second dose of a gramme the fall in temperature gradually begins falling the one-tenth of a degree of Cent. at a time; after the third dose the effect is very marked, a degree Cent. being usual. If the dose is again repeated until four or five grammes have been taken the fall reaches two degrees Cent. Its effects are particularly marked in typhoid fever. Profuse sweating follows its administration, and not unfrequently nausea, vomiting, vertigo, and headache.—*Ther. Bl.*, No. 5; *Les Nouveaux Remèdes*, No. 16.

PENTAL.

PHILLIP (*Zeitsch. f. Kinderheilkunde*) recommends pental as the best anæsthetic for children. Its advantages are—(1) Anæsthesia occurs rapidly; (2) There is very seldom excitement; (3) Consciousness quickly returns; (4) No unpleasant after-effects. The cardiac irregularity and the cyanosis cease on discontinuing the anæsthesia. The cyanosis he considers to be due to a toxic action on the respiratory centre and to atonic contraction of the diaphragm and muscle of the glottis. His experience was gained from one thousand operations, all of which were successful.