left entire in the first operation, under the twist. The surface and edges of the two raw surfaces were then adapted and retained in apposition by two sutures. In three days union had taken place, and the stitches were removed. In a week every point was cicatrized, and the nose complete.

20th February. The appearance of the new organ is now all that could be desired. The upper part has retracted upon the bridge, and the point is well supported by the little columna which has adhered to the inside, and is resting upon and attached to the remains of the cartilaginous septum. As usual in successful cases of this operation, the feature is of the form known as the hooked or Wellington nose; and as it has much improved the man's personal appearance, I have not thought it necessary to make a larger columna from the lip, which is often required; but this still remains available, if at any time he should wish it made more prominent.—*Glasgow Medical Journal.*

ARSENICAL POISONING—ARSENIC IN SUBNITRATE OF BISMUTH.

BY DR. ROBERT E. ROGERS, PROFESSOR OF CHEMISTRY IN THE UNIVERSITY OF PENNSYLVANIA.

DR. ROGERS called the attention of the College to a recent case of suspected poisoning with arsenic, the peculiar circumstances of which, as developed in the course of the legal investigation, rendered it unusually interesting in a medico-legal point of view.

The trial was suddenly cut short, and the accused party released, on account of an accidental impurity discovered by him (Dr. Rogers) in the medicine which had been administered by the attending physician of the deceased.

His object was not to discuss the evidence of poisoning in the case, although he had no doubt that, with all the facts elicited at the trial at his command, such a discussion would both be interesting and instructive; he wished to refer only to the point already alluded to as having terminated the prosecution; and, at the same time, to put the Fellows of the College on their guard against an accidental impurity of a common remedy, which had been hitherto unsuspected, viz., the presence of *arsenic acid in the subnitrate of bismuth.*

Dr. Rogers was unable, from his own knowledge, to detail the history of the case from the beginning. His connection with the investigation dated only from the time when the stomach and intestines were brought to him, carefully separated from other parts of the body, and for chemical analysis *alone.*

The examination was conducted exclusively for arsenic, since that substance was known to have been procured by the accused; while there were other circumstances tending to create the suspicion that it had been criminally administered.

The stomach and alimentary canal contained a very small amount of pulpy matter. This, taken from the stomach and then from successive portions of the bowels, was analyzed, and in each case exhibited the presence of arsenic.

The material of the stomach itself was next examined, and likewise found to contain arsenic. The bowels were then divided into five equal lengths, and each subjected to the proper tests, and with the same results.

The presence of the arsenic in all of these experiments was not only unmistakable, but very decided in amount. How much the patient had swallowed, even presuming that it had been given with intent to poison, it would have been impossible to determine by the most careful quantitative examination, since copious vomiting and purging had prevailed during several days, and up to a short period before death, so that the stomach and bowels were almost completely emptied of their previous contents.

The presence of the arsenic in the substance of the tissues examined, naturally induced the presumption that it existed in the liver, lungs, and other portions of the body of the deceased. He regretted that he had not had the opportunity to ascertain the fact, as nothing had been preserved and sent to him except the parts referred to, nor were these in a condition to enable him to recognize either the presence or absence of the physical signs of irritation or inflammation, such as might have been expected in a case of arsenical poisoning.

Hence, in the absence of any proof of an absolute amount of arsenic adequate to destroy life, the mere fact of the discovery of a poisonous adulteration of the medicine administered was considered sufficient to invalidate the evidence against the prisoner, and to justify her immediate acquittal.

During the early days of the trial, nothing occurred to indicate that arsenic had been administered as an adulterating substance of the medicine directed by the prescribing physician. At a later period, the court called for a copy of the prescriptions which had been ordered by the physician, and subnitrate of bismuth appearing as one of them, Dr. Rogers directed his efforts to determine how far that substance was pure.

He was unable to procure a specimen of the identical subnitrate which had been administered, not succeeding in finding the druggist who had sold it, but obtained a number of samples from individuals throughout the city, and prepared, many of them, by different manufacturers.

Of ten specimens, some of which were imported, which he examined, all were found to contain arsenic with the exception of two.

He did not experiment to ascertain the per centage, but inferred it to be small, too much so, he presumed, to have any material effect, except in long continued and unusually large doses. It

was not shown in this case, nor was it probable, that enough could have been taken in that way to produce the vomiting and purging, much less the fatal result. It was to be remembered also, that the symptoms attributed afterward to poisoning, had begun and continued for some time before the bismuth had been taken.

He then exhibited to the College the result of some of his analyses in the arsenical rings deposited within the tubes employed.

He remarked further, that the druggists applied to for specimens or samples did not appear to be aware of any liability to this kind of impurity in subnitrate of bismuth, a fact which rendered it still more desirable that the subject should be brought before the notice of the College—since the usual mode of preparing the subnitrate, unless great care was taken in washing the product, rather favored the presence of arsenic acid, unless the bismuth from which it is prepared be pure.—*Trans. Coll. Phys. of Philad., in Am. Journ. of Med. Sciences.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 23, 1858.

MEDICAL INSTRUCTION.

AMONG the many examples of progress in the present age, the great improvement in the art of teaching is one of the most striking. It is not fifty years since the Latin language was taught in England by means of a grammar *written in Latin*. It seemed as if the object was to throw difficulties in the way of the learner, instead of making the path of knowledge plain before him. How different is the art of instruction at the present day. The pupil is treated like a rational being, instead of an unintelligent animal; learning is made attractive, instead of repulsive; and the business of education is generally a source of pleasure both to the teacher and pupil, instead of becoming a task to both. Medical education has not been behindhand in this march of improvement, and there is already a tendency toward curtailing the tedious system of lectures, and increasing the amount of clinical instruction. The advantages of lectures in teaching the different branches of medical science are inestimable. They present to the student in a condensed form a mass of information which lies scattered in many directions, and which his imperfect acquaintance with the subject would not enable him to collect together, even if he had the time to do so; but it is beginning to be conceded that too much time is spent by the weary student in listening to tedious lectures, upon which it is difficult to fix his attention, and which are with difficulty retained in the memory, to the exclusion of the more practical study of disease. In the language of Dr. R. B. Todd, "how unnecessary in the present state of medical literature are long courses of lectures on the practice of medicine and surgery, or, indeed, on any subject not requiring demonstration and experiment! How much better