We may sum up the results as follows, comparing the amount of perspiration secreted in 100 minutes with 100 grains of the body.

Amount of perspiration in a man at rest for each 100 grains, during a space of 100 minutes=0.030,272 grains (Hoffman)

=0.1138 (Dalton*)

=0.1581 (Lavoisier and Seguin†)

Amount of perspiration in a man in motion, reduced to the same standard of time and weight— 1. 2.

=5.10119 grains 0.075584 grains (Hoffman)

=0.1575 (Sullivan)

I have analyzed the urine passed after the second experiment, without having taken food for some hours previously.

In 1000 parts, the water=977,221

Solid matter= 22,779

1000 parts of the solid matter gave

Ash=536,806

Sulphuric acid= 80,581

For the purpose of determining the quantity of sulphuric acid, the ash was dissolved in water containing nitric acid, and the sulphuric acid precipitated by means of muriate of barytes. The sulphate of barytes was now exposed to a red heat, and the acid thus calculated. This urine deposited no sediment.—*London Med. Gaz.*

ON PLASTIC OPERATIONS.

From a Clinic of Prof. Mussey, at the Commercial Hospital, Cincinnati, May 29, 1843.

THE art of restoring lost parts is said to have had its origin in India, where mutilations by law, as a penalty for crime, have been practised from a remote antiquity. This art was concealed with great care, and, whether it found its way into Egypt, as reported by Galen, or whether it was known at all by the Greeks and Romans, does not clearly appear. In the 16th century, Taliacotius, an Italian physician, distinguished himself by his skill in repairing mutilated noses; but the operation was rarely performed by other European surgeons, until within the last half century. Mr. Carpue, an English surgeon, thirty or forty years ago drew the attention of the profession to this subject by the success he met with in some operations upon the nose. More recently, Germany and France have contributed much to this department of the profession, while England has not been an idle spectator of the progress made by her neighbors. Graefe, Dieffenbach, Zeis, Dupuytren, Velpeau, Roux, Delpech, Liston, with some others, by their successful labors have given to the profession much valuable information respecting the relief, not only of native deformities, but the restoration of parts lost, or rendered useless or hideous

* Calculated from Dalton, who found the perspiration in March to amount to 37 ounces. Total weight, 140 pounds.

† According to Lavoisier and Seguin, who state the amount of perspiration as 51 ounces daily. Here, also, the total weight=140 pounds.

by casualty or disease. Our own country, too, claims to have done something worthy of mention in this province of our art. Some fifteen or twenty years ago, a surgeon near Boston, in an attempt to form a new nose, was partially successful. The patient was vain enough of the lump that had been added to his face, although it looked as much like a wen as it did like a nose. Within the last eight or ten years, Dr. J. M. Warren, of Boston, has accomplished some brilliant operations; and more recently, Drs. Pancoast and Mutter, of Philadelphia, have done themselves great credit in plastic surgery.

From the time of Taliacotius to that of Carpue, and even later, the epithet, *Taliacotian*, was applied to the operation of repairing the mutilated nose; and, until a period still more recent, plastic surgery was almost exclusively limited to this single operation. The nomenclature of Zeis is, I believe, more generally adopted, which gives a term, made from two Greek words, the one signifying to mould or form, while the other is the name of the part formed or restored. Thus we have *rhinoplasty* for these operations upon the nose, *cheiloplasty* for those of the lips, and *blepharoplasty* for the eyelids.

The patient, Mary Roney, æt. 40, who has been just before you, had, as she alleges, when a small girl, a burn upon her face, which left a bad scar and contraction of the right cheek and lower eyelid. This threw the eye constantly a little open, giving a hideous stare to the expression, exposing constantly to the air a part of the lower ocular conjunctiva. On the first of last month, April, I attempted to remedy this deformity by an operation, which some of the gentlemen present had an opportunity of witnessing. The cicatrized and contracted skin was cut through, and a portion of it dissected out. The tarsal edge of the lid, not having been destroyed, but only bent and puckered at the middle, was raised up and straightened, and allowed to remain. A patch of skin from the temple, larger than the space exposed by the removal of the cicatrix, was dissected up, and still attached by a pedicle a quarter of an inch in diameter, was applied to the exposed surface, and secured by stitches at the distance of half an inch from each other. Adhesion took place, and in a few days the patch was firmly implanted in its new situation. The pedicle adhered at its upper edge, but formed a small pouch at its lower edge by projecting over sound skin. The cuticle of this was removed by nitrate of silver, and the whole pedicle, without being divided, in a short time was identified with the surrounding integument. A difficulty still remained. The skin taken from the temple, being considerably thicker than the natural skin beneath the eye, gave a clumsy appearance to the new eyelid. This has been obviated by keeping a compress bound upon it for some weeks. Now the new skin is on a level with the surrounding parts, and applies itself very well to the eye. The color, you perceive, of the new eyelid is paler than that with which it is connected at its lower and nasal margin, and it is doubtful whether it will acquire the precise hue of the scarred and bronzed surface in its neighborhood, without the aid of a little rouge, or some other pigment, which we should pardon Miss R. for resorting to, when she comes into the world again to exhibit her new and placid physiognomy.

The case of cheiloplasty in the person of John Barnes, who was operated upon for scirrhus of the whole lower lip, last October, is familiar to most of you. It was reported in a late No. of the *Lancet*. Barnes has just been re-admitted into the Hospital, not on account of the new lip, for that remains sound, and serves well to retain the saliva, and to aid in the articulation of labials, but for an ulcer below the angle of the jaw, which is the sequel of a rapid induration at that point. The ulcer has a malignant appearance, and the induration at its base seems to be rapidly extending. The prognosis is unfavorable.

Some few of the gentlemen present recollect the case of rhinoplasty we had in this Hospital a little more than four years ago. John Cotter, about 30 years of age, was the patient. He had lost the whole of his nose by ulceration, two years before. After two weeks preparation upon a farinaceous diet, he underwent the operation, which consisted in raising a flap from the upper arm, attaching it to the face by the interrupted suture, and securing the arm by Graefe's apparatus. The flap adhered well, and was detached from the arm in ten days, and a tolerably good substitute for a nose was the result. But the ensuing winter, in the State of Indiana, Cotter, addicted as he had long been to liquor, took too much, lay out one night and froze off his nose. The following spring he came to this city and re-entered the Hospital. Another attempt was made to supply the loss by a flap from the arm. This was unsuccessful; partly I believe from his not being duly prepared for the operation, and partly from the arm not having been kept secured against all motion. The following winter he came again to the Hospital for another trial, and after having a preparation for several weeks, objected to undergoing the operation in presence of the class of students at that time in attendance, left the Hospital and took private lodgings.

The operation was performed early in February, 1841. The flap was taken from the forehead. The next day the parts appeared well, but on the third day the face was attacked with erysipelas, and almost one vertical half of the flap sloughed, while the rest adhered. After this had become sufficiently consolidated, I took another flap from the forehead and attached it to the first, near the median line. This adhered throughout, and the whole in due time became solid, with the columna firmly implanted upon the base of the upper lip.

It was not until some weeks after the operation, that I was able to explain the accession of erysipelas on the third day, and which had well nigh frustrated the object altogether. From a member of the family, I learned that the patient, on the day of the operation, and the day following, drank spirit somewhat freely, furnished him by his old companions, whose sympathies were manifested in a way which he knew not how to resist. After the completion of the cure, he was induced to sign the pledge of total abstinence from all intoxicating drinks, which pledge I believe he has faithfully kept. He called on me a few weeks since, and assured me that he had not in a single instance violated his temperance engagement, which statement the appearance of his face confirmed. His nose is sound, sufficiently voluminous and prominent, and looks enough

like a nose to pass respectably ; for, amidst the endless diversity of form in this important feature of man's face, almost no variety can be imagined, which has not its prototype somewhere in the multitude.—*Western Lancet*.

CASE OF HEMIPLEGIA.

[DR. J. M. FOLTZ, Surg. U. S. N., relates the following case in the first No. of the New York Journal of Medicine. It occurred in the U. S. Naval Hospital at Mahon.]

One of the most important cases under treatment at this time, was that of Assistant Surgeon Van Wyck, who was affected with hemiplegia. As we had but a short time previously met with several of the cases of Mr. Turnbull, in London, in which the use of the strychnine was attended with benefit, we eagerly embraced this opportunity of prescribing this article; and from the youth and general good health of the patient, we entered upon the treatment, sanguine of success. The patient was 21 years of age, and had just entered the navy after a collegiate course, in which he had carried away the highest honors; and from his devotion to his profession, he promised much future usefulness. Within twenty-four hours of sailing from New York, he was seized with paralysis of the left side, which also deprived him of the powers of articulation. Three months elapsed from the time of being paralyzed, until he came under our care. From the time of the attack he had been subject to violent epileptic convulsions, which returned periodically, at intervals of about a fortnight. For this he had been copiously bled, which for the future was avoided as much as possible; and it was found that arresting the circulation in the extremities by means of a tourniquet, would seldom fail to put a stop to the convulsions, which is a method of treatment that we have practised with much success in the epilepsy of seamen—a class of men who are very obnoxious to this disease. We have recently seen it mentioned in the European journals, that pressure upon the carotids will seldom fail to arrest epileptic convulsions; and from the benefit which we have so frequently witnessed, from pressure upon the arteries of the extremities, we could confidently anticipate the best results from interrupting the circulation in the carotids, in those cases in which there is so great a determination to the brain, as frequently to cause the production of lesions and effusions. The strychnine was ordered in solution, commencing with one-sixteenth of a grain, *ter in die*, and the paralyzed side was bathed once a day with a solution of nux vomica. The dose was gradually increased until one third of a grain was taken, when spasms and involuntary muscular contractions took place in the paralyzed limbs. This manifestation of the influence of the medicine was hailed as a favorable symptom, and its use was now diligently persevered in, with the effect of increasing the spasmodic action to a great extent; but no additional voluntary motion was acquired. At the termination of eight weeks' use of the strychnine, as the convulsions