diameter and length, was much greater and also the thickness of the wall, yet the mechanical functioning was good. The gross arterial appearance of the segment was vastly changed, the walls being greatly hardened and transparent. The intima was perfectly smooth and glistening. On section the increased thickening of the wall was found to be in large part due to an increase in the fibrous tissue. Here, then, we have excellent preservation of mechanical function, notwithstanding very great alteration in physical and histologic structure.

On examining a segment of dog's vena cava preserved for sixty days in 2.5 per cent. formalin, then washed in dilute ammonia, dehydrated in absolute alcohol, impregnated with paraffin oil, and then transplanted between the ends of the divided common carotid artery of a bitch, three weeks after the operation, the segment appeared much the same as the arterial segment above described did at the corresponding time, taking the difference in arterial and venous structure into account.*

The question naturally arises, therefore, do the cells of the segments of blood vessels actually survive, and by their growth and multiplication account for the histologic changes observed; or do they, to a greater or lesser extent, perish and only preserve the mechanical function of the segment, and serve as a bridge for the ingrowth of other cells after which they suffer degenerative and absorptive changes?

The work of Eiselsberg,⁹ Christiani¹⁰ and others would lead us to conclude, *a priori*, that even when replaced in the same animal from which it was removed only a thin layer of the outer cells in such a transplanted segment of blood vessel could survive. As to the intima, I know of no results obtained under exactly comparable conditions, that is, transplantation of similar tissues into blood vessels. The results of Busch and Van Bergen¹¹ on survival of cells of the suprarenal cells transplanted into the spleen might possibly be quoted in favor of survival of the intimal cells.

But in the case of the transplanted formaldehyd-fixed segment it is hardly conceivable that any of the cells could have survived, yet after a considerable interval it performs the mechanical function required of it and macroscopically differs not greatly from what would be expected of a fresh segment transplanted in similar fashion.

Unfortunately, premature conclusions seem to have been drawn concerning the survival of the cells of such transplanted segments of blood vessels.¹² From a purely practical standpoint it may be of no consequence, but scientifically it is of much importance. The problem is one of great complexity, and until a very material addition to the present data is made conclusions and generalizations should be held in abeyance, or, if uttered, disregarded.

8. Guthrie: Transplantation of Formaldehyd-Fixed Blood Vessels. Science, 1908.

9. Wien. klin. Wochschr., 1892, v, 81.

10. Compt. Rend. d. Séances Soc. Biol., 1894, 716; 1900, 967. Id.: Arch. de Physiol., 1895, xxvii, 65. Id.: Jour. de Physiol. et de path. gen., 1901, 204.

11. Proc. Am. Physiol. Soc. Id.: Am. Jour. of Physiol., 1905, xlii, 16.

12. Flexner: Science, N. S., 1908, xxvii, 682, 130.

Relation of Breast Tumors to Lactation.—H. P. Cole, in the *Mobile Medical and Surgical Journal*, states that malignant tumors are rarely observed during lactation or just after. They generally begin some years after the last lactation, which is explained in part by the fact that cancer less frequently occurs between the ages of 20 and 30—the age at which lactation is most frequent.

A MIDDLE-EAR INSPIRATOR.

PERCY R. WOOD, M.D.

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Tinnitus aurium, which is frequently an annoying and persistent sequel to acute and chronic Eustachian and middle ear catarrh, is often permanently relieved by inflation of the middle ear for a prolonged period. This is not generally appreciated and many patients find a prolonged course of office treatment prohibitive for lack of time or means. I have devised for home use the instrument illustrated, which consists of a glass tube bent on itself. One extremity is shaped for insertion into one naris, while the other retains the medicament and is inserted between the lips. When charged and in place a sudden expiration forces the medicated vapor into the middle ear. Persistent application of this instrument for some weeks or months permanently relieves tinnitus and morbid pathologic conditions of the Eustachian and intertympanic membranes in a large percentage of cases.

Middle-ear inspirator. A, medicated cotton; B, oakum; C, rubber tip for insertion into naris.

The following solution is serviceable:

Chloroform	120	3iv
Ether	60	5ii
Alcohol	8	3ii
Oil of rose, enough to scent.		

PYLOROPLASTY (DUODENAL-GASTROSTOMY) FOR PYLORIC CONSTRICTION.

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JACKSONVILLE, FLA.

Pyloric constriction, of whatever nature, is a condition with which surgery alone can contend. Whether non-malignant or malignant, two methods of surgical intervention lie before us—that of pyloroplasty and of gastroenterostomy. The method elected in the following case is that known as Heineke and Mikulicz, the technic being slightly modified, however, to meet the indications present.

Patient.—Mrs. W., aged 39, 5 feet 3 inches tall, was reduced from a normal weight of 108 pounds three years previously to but 68 pounds nine weeks previous to my seeing her. She had become even more emaciated at the time of operation, and it seemed to me remarkable how one could live with such marked emaciation and so little degree of strength. Gradual progressive starvation was the prospect before her. For two years her diet had been liquid in character. During this time there was frequently in evidence a seeming muscular gastric spasm, not always associated, however, with eructation and vomiting.

Examination.—On examination there was felt in the region of the pylorus a dense movable mass, approximately the size of a lemon. Especially was this marked during the effort of regurgitation or of eructation. There were no symptoms of gastric or duodenal ulcer or of any malignant trouble. From the foregoing clinical picture I arrived at a diagnosis of pyloric constriction. An exploratory section was advised, and, further, if the conditions found and the patient's strength warranted, a surgical procedure to overcome the existing cause, to which the patient willingly consented.

Operation.—A slightly S-shaped incision, 4 inches in length, was made to the right of the median line above the umbilicus, which brought the pyloric end of the stomach plainly into view. On drawing the pylorus up into the abdominal opening, it was found of firm and dense consistence, its caliber being less than that of my little finger. There was no evidence of malignancy. A Heineke and Mikulicz pyloroplasty was the operation elected. An incision, 2 inches in length, was made in the axis of and through the anterior wall of the pylorus, extending slightly into the duodenum. The incision was then drawn tense transverse to the pyloric axis, thus considerably enlarging the lumen to that of one's thumb. Coaptation was then made by folding over the edges of the duodenum and pylorus, a double row of mattress Lembert sutures of 20-day chromicized catgut being used. The abdominal wound was then closed. No rise of temperature or untoward symptom followed on this operative procedure. The remote result, too, symptomatically, was very gratifying. She has since gained fully fifteen pounds. The time that has elapsed since the operation, four months, is as yet too short to make any positive statement as to permanent cure, though present indications point to that end.

HYSTERIA IN ITALIANS.

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During the past five years I was called to attend many cases of hysteria among adult male Italians. I find the French people are very prone to attacks of hysteria, but cases among the Italian people are more frequent. I will not attempt to give individual histories, symptoms, etc., of cases treated by me, but will describe them all collectively, for it is a fact that the causes, symptoms and treatment were almost identical in all of the cases.

Antonio B., 42 years old, born in Italy, married; family history negative.

Present Illness.—On Feb. 7, 1907, in the morning, he was playing cards with friends and seemed to be in a normal state of mind. Went home at 1 p. m. His son asked him to eat dinner, but he did not reply. He immediately went to bed and started to cry, seemed frightened at his friends who came in to visit him. He crouched himself up in bed, and apparently seemed to have lost his power of speech, as he flatly refused to answer any questions put to him by his son or friends.

His son, becoming alarmed at his father's loss of voice, hurriedly sent for me. One glance at the man told me that it was a case of hysteria. I asked him his name, but with tears in his eyes he stared at me and refused to answer. He then began to go through a series of funny contortions, stand on his head, grind his teeth (so vigorously that it could be heard in the next room), pull his hair and cry. Between these acts he would try hard to vomit and choke. His friends becoming alarmed at this state of affairs, repeatedly asked me if the patient was going to die. In the presence of the patient I admitted that he would. Going into an adjoining room, I explained the nature of the disease to his friends and told them that I was going to fool the patient by using a little strata-gem; that some worry had brought on this attack.

I re-entered the sick room with three of the friends, and in a loud voice I announced that in order to save the man's life I would be compelled to amputate, then and there, his left hand at the wrist joint; that this was the only means of saving his life; that cutting off the hand would bring back his speech and cause him to regain his mind. So taking some scalpels out of my bag and calling for some hot water, towels, dishes, napkins and a cuspidor to contain the blood, and requesting two men to grasp the left hand of the patient, I was about ready to "cut" when my patient exclaimed in a loud voice, "Whata you wanta? I no sicka, I no needa a dottore." The rest was easy. He now answered all questions, and at once stopped all of his convulsive actions. He told me what the trouble was. His first wife died. He remarried and this second wife had left him alone with six children to look after, and furthermore, he was out of work a long time.

Without exception, every case among the Italians started in with loss of speech, convulsive movements, grinding of the teeth, pulling of the hair, sobbing, crying, etc. All the cases depended on some worry due to trouble in the family. Fathers, mothers, sisters and brothers left behind in Italy caused the greatest worry.

Every patient was suddenly "cured" by giving him to understand that he was really a sick man, and that in order to save his life it was absolutely necessary to amputate his left hand immediately. Then, and then only, would the patient admit that he was not sick.

This line of treatment may not be applicable to all cases of hysteria, but I find that after trying the ordinary methods of treatment in this class of patients, namely, the laboring Italians, I do not get results anywhere near as satisfactory as I do in utilizing this method of artifice.

I have not heard of any recurrence of hysteria in any of the cases I have so treated.

Special Article

MEDICAL CONDITIONS ON THE LABRADOR COAST AND NORTH NEWFOUNDLAND.

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To the general public in the United States and Canada Dr. Grenfell and his work are not unknown and need no introduction, but no paper, so far as I know, has appeared dealing with his work strictly from a medical standpoint. The following is written to bring his work before the profession in the hope that it may interest some who will be willing and able to help in the future should opportunity arise. The Mission to Deep Sea Fishermen maintains a hospital in North Newfoundland and three hospitals on the coast of Labrador. Dr. Grenfell travels these coasts by dog sledge in winter and in summer on his small hospital steamship *Strathcona*, visiting and operating not only at the hospitals but carrying medical aid and help in many forms to all the people on these long, desolate coasts. For accounts of how he does this, I must refer to other sources, simply stating that the work is supported by private contribution.

This paper (written from St. Anthony, Newfoundland), is intended to give a general idea of the medical work done, with some of its special points of interest.

The number of cases treated on board the *Strathcona* in the summer of 1907 exceeded 1,200. Besides these there were treated at each of the four hospitals maintained by the mission between 500 and 700 cases. Taking 600 as an average, the total number of patients for the five months, June to October, would be approximately 3,600. As I have not the exact figures from the other three hospitals, and communication is impossible at this time of year, I can not give the exact number, but this is, if anything, an underestimation. Before coming to this work I was told that it consisted in treating three classes of cases, indigestion, constipation and phthisis, their relative frequency being in the order named, with an occasional scattering case of interest, opening of boils, pulling of teeth, and a very occasional operation.

There is a doctor at each of the hospitals, but operative work, unless urgent, is done when the *Strathcona* reaches them. I believe that the clinic compares favorably with those in our hospitals at home.

There are three chief classes of patients, and each class presents certain peculiarities from a medical aspect. These are: 1, The Eskimos; 2, the all-the-year-round inhabitants; and 3, the schooner-men, and those brought down in ships for the summer fishing.

1. The Eskimos, while they have immense physical endurance, and can row or tramp all day and stand any amount