less, anatomical considerations did not make it clear to me why, during the course of the operation, it had seemd so easy, comparatively speaking ,to gain access to the esophagus. Of course it must be remembered that I made use of considerable traction downward by pulling on the stomach itself, and it was in this way that the subd aphragmatic portion of the esophagus became markedly elongated.

This practical demonstration in the living subject received anatomical corroboration from the prosector at the anatomical institute of the university. I was informed that it was always possible under normal conditions to elongate by traction the lower subdiaphragmatic portion of the esophagus.

The accompanying lymph nodes were found to be non-cancerous.

Practical Anatomical Observations.—I would like in the first place to say a few words in regard to the technique of the foregoing operation. Langenbuck,* in conection with his recorded gastrectomies, has published the following statements: "Of course, my gastrectomies did not amount to total extirpation of the stomach. And, indeed, total ablation appears to be practically impossible toward the cardiac extremity of the stomach. For the cardiac portion has, like the head of the humerus, an anatomical as well as a surgical neck. Bearing in mind this anatomical peculiarity, it seems admissible to regard my operation as instances of total exsections of the stomach. For in both cases I removed as much of the organ as was technically possible."

Now, the boundary line between the esophagus and cardiac extremity of the stomach is clearly defined. The former is supplied with pavement epithelium; the latter shows the cylindrical variety. Personal observation and experiments on the cadaver fully confirmed this observation.

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*Deutsche medicinische Wochenschrift, p. 969, 1894

In the case of my patient it should also be borne in mind that as soon as the Wolfler clamp was removed, marked upward traction of the esophageal stump was witnessed. Possibly the weight of the neoplasm had previously contributed its share toward dragging down the esophagus. I cannot, therefore, accept the quoted statements of Lagenbach.

Dietary Considerations Following Removal of the Stomach.—In attempting suitably to regulate the nutrition of my patient after the operation, it became first of all necessary to bear in mind what functions had been done away with by complete ablation of the stomach. It seemed to me a priori possible that the patient should survive, on account of the previous practical elimination of all gastric functions, owing to the large size of the tumor. Nevertheless, it became an object of my solicitude to discover means for the compensatory substitution of something new in place of the loss of the old. It is true, modern physiological research no longer vouchsafes to the stomach its role as chief organ of the digestive apparatus. Nevertheless ,its importance in chemical as well as in physical respects should not be underestimated. It is still a question whether the human organism can long survive the total elimination of all gastric activity.

Physiological Observations.—It is well known that considered merely as food reservoir, the stomach exercises a highly beneficial influence over all ingesta. Food is retained for a shorter or longer period in the stomach, according to differences in its nature. To the bowel there is thus assured a measurable degree of safety from overloading. As a corrector of widely different degrees of temperature of various kinds of foods, the stomach certainly fulfills an important office. The well known chemical and mechanical activities of the stomach, as also the disinfecting potency of its secretions, need not be specifically dwelt upon to establish the manifold importance of this organ. The bactericide action of gastric juice in cholera and other diseases need only be mentioned in passing. The capacity for absorbing certain liquids while not so important as was formerly believed, should nevertheless also be borne in mind.*

Clinical Observations in Connection with the Obliteration of all Gastric functions after the Operation.—There being no food receptacle after ablation of the stomach, it becam-