tine and after the second day, peptonized milk, three ounces every four hours, this tube also served for the escape of gases from the intestines. On Saturday night a saturated solution of epsom salts (four ounces) was introduced through the tube; this produced copious liquid stools, continuing all through the next day.

By Tuesday Mr. W. began to keep a little liquid food on his stomach. The temperature fell after the operation, and never again rose above 100° F. On Wednesday the dressings were removed and new dressings substituted. On Sunday, the 16th, the glass tube was removed as the ligature confining it in the cecum had sloughed away; the upper part of the cecum with the artificial opening appeared in the middle of the abdominal wound well walled away from the peritoneal cavity.

From that time onward there has been steady improvement. The wound in the abdomen is fast healing, and the opening in the cecum is every day contracting, and the slight fistula which yet remains will probably soon be entirely closed.¹

Mr. W. is gaining strength and appetite, and no untoward result is now anticipated. The members of the hospital staff are disposed to attribute the favorable termination of this case to the Mixer tube, for we have seen so many in our hospital and in private practice die in similar conditions when the tube was not used. In fact, many of us from sad experience had been led to assume that every patient afflicted with acute perforative appendicitis with general peritonitis must necessarily die.

To Dr. S. J. Mixer belongs the credit of having introduced this improvement in the technique of laparotomy operations in desperate cases, and he first called attention to the advantages of this method in the *Boston Medical and Surgical Journal*, February 28, 1895, page 206. He says:

"When the bowel seems to be paralyzed from inflammation, and there is reason to think that neither the stomach nor rectum will retain and absorb the necessary salts, stimulants, or food, a temporary opening may be made in the cecum. . . . This is best done by means of a curved tube with a button on the end, which is introduced through a small hole made in the most prominent part of the cecum, and tied in, so that leakage shall not occur around it for the first twenty-four hours. This is packed about with gauze and a rubber tube is carried from it through the dressing. Through this tube we can draw off any gas or feces that may accumulate, and introduce our salts and stimulants with less trouble and much greater certainty than by the rectum."

BOERHAAVE AND HIS JOKE.—Boerhaave thought even the most eminent practitioner was somewhat of a "humbug." He gave to his executor the key of a small diary, bidding him open it immediately after his decease, and publish the contents. When the notebook was unlocked all its pages but the last were blank, and on that was written in large letters:—"Directions to patients: Keep your feet warm and your head cool, and trust for the rest to Providence."

¹ At the present date (November 20th) the fistula is still open, though the discharge is very slight—not more than a teaspoonful per day of yellowish mucus, with no odor; when the bowels are loose, there is quite an escape of liquid fecal matter. There is only a pinpoint orifice, and it seems probable that this will soon be entirely closed. W. is now quite well and doing hard work every day.

Medical Progress.

THE PROGRESS OF ANATOMY DURING THE PAST TWENTY-FOUR YEARS.

BY THOMAS DWIGHT, M.D., BOSTON.

IN a foot-note at the beginning of the last report on anatomy, published last June, the writer stated that the fiftieth report had been written, and that after recalling this autumn the progress of anatomy during the past twenty-five years, he was about to relinquish the task. To his disappointment he has since discovered that the first report appeared September 5, 1872, and that consequently the present report is only the forty-ninth. He cannot, however, change his plan. This report is the last; but it can treat of the progress during only twenty-four years instead of twenty-five.

It has been a rich period for anatomy, which many, twenty-four years ago, would have called an exhausted science, at least considered macroscopically. The grossness of that error is now patent.

Progress is reflected in the pages of text-books. How different is Gray now from that old edition! How much more different is Quain! Morris has appeared to dispute with them the supremacy. Macalister has written an excellent book, and spoiled it by bad arrangement. In this country we have had the textbook of Harrison Allen (deserving, we think, a warmer welcome than it received) and the topographical anatomy of McClellan. Cunningham's "Manual of Practical Anatomy" has been a valuable addition, from Dublin. In Germany, Henle's great work was not finished twenty-four years ago. In spite of defective methods of illustration, it has ruled as the highest authority in the world, though certain parts are no longer equal to the demands of the times. In France, Cruveilhier and Sappey, different, but both good, have been held in equal esteem. Luschka's anatomy, to a certain extent topographical, is still an authority for accurate description. But Braune's great "Atlas of Frozen Sections" and Rüdinger's "Topographical Anatomy" opened a new field. In France a very successful book has been Tillaux's "*Anatomie Topographique*," which has passed through several editions. The only criticism of his plan was that it confined itself too strictly to surgical relations and applications. In Germany, Pansch began a most admirable book in the form of lectures to practitioners and advanced students, which was a topographical and applied anatomy in the best sense; but his premature death brought it to an early close. Merkel's "Topographical Anatomy" is a work of a far wider scope and will be a classic should it ever be finished. The first part appeared in 1885, and it is barely half completed. A new descriptive anatomy to replace Henle has been undertaken by many anatomists, under the leadership of Bardeleben. A wonderfully and deservedly successful book is that by Testut, in three volumes, with excellent illustrations and diagrams. Any one competent to discuss the question must be amazed at the progress of this period, if he will only compare the books that flourished at its beginning with those now in dominion or entering the field.

One of the greatest changes of anatomical teaching in this period has been the gradual abandonment of what was formerly called descriptive anatomy, pure and simple, in which each system—the bones, the

joints, the muscles, etc. — was taught as if it were valuable knowledge to know how each looked when separated from all its surroundings in the most artificial manner possible. Topographical anatomy, what there was of it, was looked upon as merely surgical, and not only that, but as restricted to the so-called classical operations. The true relations of the viscera were practically an unknown field, and what was worse, no one seemed to care to explore it. Frozen sections had been introduced before this period, but it was not till after its beginning that their influence was felt beyond Russia and Germany. The magnificent work of Braune showed that valuable as dissection must always be for the study of anatomy, by itself it is insufficient, and needs to be supplemented with the sectional method. Still it was not by sections, but by hardening injections that His accomplished his great demonstration of the true shape of the viscera. More recently still these methods have been supplemented by that of reconstruction, which is not as yet fully worked out. Formaline promises to be of much value in this process. The method of studying the body from the standpoint of embryology has made another series of changes in anatomical teaching. Of course, it is subject to abuse, and, indeed, much that was unauthorized has been claimed for its use as a basis of classification, because this has been done prematurely; but none the less it has thrown floods of light on the processes by which such originally simple, and finally complicated, organs as the brain and peritoneum reach their adult condition.

In our first report, on September 5, 1872, we devoted much space to a discussion of Professor Wilder's views on the archetype skeleton. We committed ourselves to the opinion, that has since proved correct, that the study of transcendental anatomy was on the decline. There was no place for it in the system that, making evolution an affair of chance, excluded plan, design or purpose. But now that sober second thought has asserted its sway, and that it is allowable to say without loss of scientific caste that evolution is in no way antagonistic to design and to purpose, it is not surprising that the idea of a ground-plan of an animal should again assert itself. Let us hope that should the archetype reappear, he will be studied with more caution than in the days of Oken and Maclise.

In the same report various methods of preserving anatomical material were discussed. Carbolic acid was then fashionable, and glycerine received due recognition. It is surprising how little improvement there has been in this respect since then. For certain purposes formaline promises much. There has been no other new agent worth talking of. Wickersheimer's fluid is fairly efficient, particularly if enough carbolic acid be added. A new method, however, has arisen, that though not taking the place of preservative injections, has yet done much for preservation, namely, cold storage; which is used in several of the leading schools.

A great deal of work has been done on the mechanics of bones and joints and of the skeleton as a whole. Hermann von Meyer is easily first in this branch, though to him does not belong the credit of showing that the cancelli of bone represent studs and braces. Doubtless he made the discovery for himself; but it had been made long before him by Harvard's anatomist, the lamented Jeffries Wyman. Perhaps the idea had occurred to others before him.

Professor Heiberg's work on the elbow deserves mention. He demonstrated how a combination of flexion or extension with lateral motion of the ulna accounted for the changes in position that the lower end undoubtedly undergoes when the hand is twisted. The only blemish was the unfortunate use of the word "rotation" as applied to that bone, which implied an error he had not really been guilty of.

The name of Jeffries Wyman brings back a remarkable piece of anatomical work in connection with a celebrated trial, when that anatomist put together such pieces of a murdered man's body as could be found, and pronounced on the height. Since then the studies of Topinard, Rollet, Manouvrier, with some poor contributions by the writer, have added much to our knowledge of the facts concerned in a question that may be of such importance. A competent anatomist should be able to put together very accurately the pieces of a skeleton if they be present. If important parts be wanting he can calculate the height from the long bones, sometimes with surprising accuracy, but in more than half the cases the error exceeds one inch. Unfortunately, in one quarter of the cases it is as great as two inches, which is enough to discredit the method, except with certain limitations, or as merely confirmatory evidence.

With regard to individual variations of the bones and of other parts of the body much has been done. The practically universal adoption of the doctrine of evolution as a working hypothesis has entirely changed the mode of anatomical thought, both for good and for evil. It has given a great impulse to study. Anomalies that were formally dismissed with contemptuous interest as "freaks of nature" have since been studied as having a scientific bearing. The result of this has not been merely an increase of scientific interest; much practical advantage to surgery has arisen from the knowledge of the possible variations of important structures. What surgeon twenty-four years ago would have thought of a cervical rib in connection with a tumor at the root of the neck? The large series of statistics which were first in this country gathered at the Harvard Medical School, and are now being collected still more extensively at other places, are likely to prove of anthropological value. The surgical importance of several is undoubted. It is curious that the study of anomalies has proved disappointing in a connection from which much was expected of it, namely, as throwing light on the ancestry of man's body. While numberless animal peculiarities have been found, they point in no single direction, and are of such diverse significance that they have confused instead of elucidating the question. As an example of their misuse, now happily less common than it was, we may mention that some months ago we saw in a treatise on the appendix vermiformis, the statement that the cases of double appendix said to have been observed, are presumably to be explained by the double cæca which occur in many birds! While such sham science is still exploited by its votaries, serious thinkers find the question more and more difficult.

The knowledge of the viscera has increased most remarkably. Twenty-four years ago the presence of adenoid tissue at the top of the pharynx was, indeed, known to anatomists; but the third or pharyngeal tonsil as a well-defined entity was not recognized. We wrote of Treves's excellent lecture on the intes-

tines, that we believed it to contain for the first time in English the statement that the cecum is entirely covered by peritoneum. The fact was, indeed, known in Germany, and some of us may have thought we knew it too; but unfortunately, so far as we know, no one said so, and the stupid error of a posterior wall of the cecum connected by areolar tissue to the iliac fossa, was allowed to live. His discoveries of the relations of the viscera have been hardly less important. They were accepted, but slowly. If we do not mistake, Luschka described correctly the position of the stomach in 1868 or 1869, but it was many years before it was generally received. The position of the ovaries, of the kidneys, the exact lines of the upper and lower limits of the pleuræ and their relations to the sternum, have all been discussed, and in most cases settled.

Aseptic surgery has given a great impetus to abdominal anatomy. Numberless measurements of the appendix have been made, and the folds of the peritoneum thoroughly investigated. Of far more value than the endless repetition of measurements, are the many observations on peculiar arrangements of the intestines and peritoneum, which cannot but be of great help to the surgeon.

The anatomy of the brain has been transformed. The Golgi method has revolutionized the minute anatomy, and immense work has been lavished on the course of the fibres. The developmental method of teaching has been of practical use in instruction. The convolutions, of which many professors of anatomy knew practically nothing a generation ago, have sprung into perhaps even a greater prominence than they deserve. A host of anatomists have described them most thoroughly and compared them with those of animals. The great difficulty of determining how far a common plan can be made to serve for the primate and carnivora brain is still unsolved. Professor Wilder is laboring conscientiously to note the characteristics of the brains of law-abiding, educated and intelligent men and women. He has the nucleus of what may become an unique collection of known brains. But if the arrangement of the convolutions still is somewhat unsatisfactory as a basis of scientific work, enough has been done on localization to make the situation of the great motor cortical centres in relation to the skull a matter of vast interest. Many methods of quickly placing these centres have been presented, the too cumbersome are being ignored; and practically the question may be held to be closed.

The veins have to a great extent been rediscovered, chiefly through the labors of Braune, who died too soon for science, and of a few others, among whom Debierre and Lejars may be mentioned.

Valves in veins of the portal system, especially in the fetus and infant, have been shown by Hochstetter and, here, by Bryant. The remarkable fact has also been pointed out by Klotz, in regard to the veins of the lower extremity, that there is a marked destruction or degeneration of the valves during life, beginning probably in youth. Is it possible that the want of the suction power of respiration in the embryo, makes the presence of valves more necessary than in later life, and that thus there is a continual retrogression? Bardeleben has also formulated a law as to the distance between valves.

The anatomy of childhood is a branch that till the present generation has received little attention.

Henke, Symington, Ballantyne, Chipault and others have done much for it, but there is still room for more investigations. The application of frozen sections to this study has been very fortunate.

The subject of nomenclature has been widely discussed. The Anatomische Gesellschaft appointed a committee a few years ago, comprising members of other than German nationality, which has recently reported, to the great satisfaction of the German contingent. Whether the terms suggested will be very generally adopted remains to be seen, but it is probable that being the standard in Germany, it will have much influence. In this connection Professor His made the error of alluding to the "American system," meaning that of Professor Wilder. In point of fact the Association of American Anatomists has adopted but few of Dr. Wilder's suggestions. On the other hand, that gentleman, through the influence of his position and the support of his colleagues and pupils, has certainly made a considerable progress; and it will indeed be surprising, if with his patience, determination and single-mindedness, he does not make more. Some of his principles, such as the abandonment of proper names in favor of descriptive ones, will undoubtedly be successful at most points. Still the acceptance of his system as a whole is a long way off. As one who does not incline to accept it, the writer is happy to bear witness to the good it has incidentally done.

Reports of Societies.

AMERICAN DERMATOLOGICAL ASSOCIATION.

TWENTIETH ANNUAL MEETING, HOT SPRINGS, VA.,
SEPTEMBER 8-10, 1896.

THE President, DR. A. R. ROBINSON, of New York, in his

ANNUAL ADDRESS

first spoke in eulogy of the late Dr. Edward Wigglesworth, of Boston, whose loss to the Association has been so keenly felt. He was one of the oldest and most esteemed members and one who always took an active and enthusiastic part in the Society's work. By his earnest scientific spirit and influence he accomplished much for the advance of dermatology in this country, especially in the early days of this Association's existence.

The question of medical education in the United States and more especially education as it affected the dermatologist was then taken up. Too little attention is given to skin diseases in our medical colleges, and too little knowledge of them is required in order to secure a degree. The specialist and teacher in this branch does not stand in the position he should, not only in his relation to the school but likewise in his relations to the general practitioner and the profession at large. While this is in a measure his own fault, the management of the medical college is responsible for much in the policy which it adopts depreciating the importance of proper and adequate instruction in this branch. Dermatologists must uphold the dignity of their work and must continue to fight for rightful recognition, and demand that a student be not given his diploma until he is qualified to treat as well as