result of hastening metamorphosis with all of the attendant modifications, as had been known from the work of Gudernatsch, it did not in any wise modify the rate of development of the germ glands and germ cells.

The most striking result of all is the evidence brought forth to show that germ cells and soma are different in their nature, that the germ cells are unaffected by the thyroid, while the soma is so profoundly influenced by it. It is possible that further work may show that there are other structures that continue their development unhindered in the absence of the thyroid gland, but the work thus far has failed to demonstrate them.

This investigation throws light upon the problem of neoteny. We can with perfect justice say that we are here dealing with a case of artificially produced neoteny in a form which does not show it in nature. Here we can point to a very specific cause for this phenomenon, about which there has been so much conflicting speculation.

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University of Kansas

THE STANSIPHON

Amongst the many interesting and useful pieces of apparatus shown in the scientific exhibit during the Christmas meetings of the American Association for the Advancement of Science was a self-starting siphon, the trade name for which is the Stansiphon.

For the information of those members of the society who did not see the model shown at that time and in the general interest of science, I am giving a brief description of its construction and operation followed by a statement of some of its more practical applications as well as inherent limitations as at present constructed.

The self-starting device is shown in Fig. 1 and consists of a bulb (4) sealed into the lower end of the tube (2) and an inner tube (5) sealed into the base of the bulb and reaching into the opening of the bulb at the top. Here the end is somewhat constricted and its size and position with respect to the top of the bulb is so adjusted that an "air trap" is produced at (6). A small opening (7) is made at the lower part of the bulb.

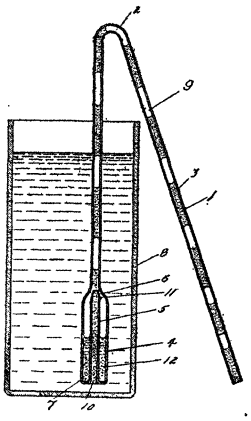

Fig. 1.

If the bulb be inserted to a considerable depth into the liquid to be siphoned, the liquid flows into the bulb through (7) and displaces the air which with the water passing through the inner tube (5) rises in a broken column in tube (2) and flows out through the delivery tube.

The height to which the given liquid may be raised will depend on the size of the bulb, the depth to which it is immersed, the construction of the "air trap," the material of which the siphon is made, the rate at which the bulb is inserted, etc. To operate successfully on ordinary liquids the Stansiphon should be immersed to a depth at least two or three times the length of the bulb.

Preliminary experiments were made by the inventor on water and the present design has greatly increased the efficiency of the siphon, both as to height lifted, and the rate of flow. A design of larger size has been made which successfully siphons acids from carboys, but owing to the heavy density of these acids it works relatively slowly as compared with water. Light oils such as kerosene and gasoline are readily siphoned by this method, but as yet a suitable design depending on this principle has not been found for the heavier oils.

The wide application of the Stansiphon is

apparent especially in chemical laboratories, drug stores, manufacturing and other establishments where liquids and various solutions are in constant use. In transferring corrosive poisons or valuable liquids it obviates liability to accident or waste. It should also have a wide application in the filling and emptying of all sizes of storage-battery jars. It is at present being used for siphoning beer from kegs and wine from barrels. When a solution is to be kept "on tap" for instant use a stopcock may be provided. These siphons in addition to glass are being made of brass, copper, zinc, lead, iron, hard rubber, etc.

When the self-starting attachment is sealed to a straight tube ending in a capillary, a very efficient intermittent Hero's Fountain is obtained, as shown in Fig. 2.

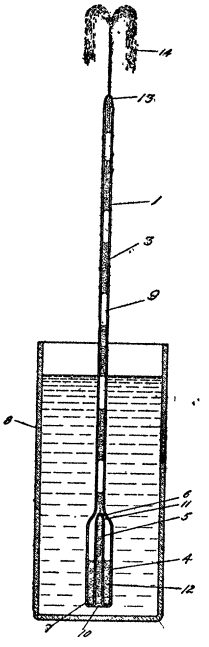

FIG. 2.

Application for patent rights has been made in the name of the inventor, Gustavus A. Storm, but all rights, title and interest in the same has been assigned to the Standard Scientific Company of New York.

P. B. PERKINS

BROWN UNIVERSITY

THE AMERICAN PHILOSOPHICAL SOCIETY

AT the annual general meeting of the society held in Philadelphia from April 13 to 15, the address of welcome was made by the President, Dr. W. W. Keen, who, with Vice-presidents W. B. Scott, George E. Hale and Albert A. Michelson, presided. This meeting is a notable event among scholars and over forty papers were presented in the sciences and in the humanities. The national crisis also received some attention, Dr. M. T. Bogert, of Columbia University, outlining the work chemists may do to aid the National Research Council in the solution of certain war problems. Proper insignia to identify "members of the industrial army" so they may not be called slackers was urged. Attention was called to England's sad mistake in permitting general enlistment for "the front" when in many cases men with special ability could have been of so much more value using their brains in the laboratory. A well-trained industrial army is just as important as the army of fighters. The program with a number of abstracts follows.

APRIL 12

William W. Keen, M.D., LL.D., President, in the chair

The trial of animals—a little known chapter of medieval jurisprudence: HAMPTON L. CARSON, LL.D., Philadelphia.

Medieval sermon-books and stories and their study since 1883: THOMAS FREDERICK CRANE, Ph.D., Litt.D., professor emeritus of the Romance languages and literature, Cornell University.

Some recent acquisitions to the Yale collection: ALBERT T. CLAY, LL.D., professor of Assyriology and Babylonian literature, Yale University.

Vision as a physical process: HERBERT E. IVES, Philadelphia. (Introduced by Dr. A. W. Goodspeed.)

The diagnostic method of training intelligence: an education for the fortunate few: LIGHTNER WITMER, Ph.D., director of the Laboratory of Psychology, University of Pennsylvania.

Historical notes on "the armament of Igor": J. DYNELEY PRINCE, Ph.D., professor of Slavonic languages, Columbia University.

A new translation of the Hebrew Bible: CYRUS ADLER, Ph.D., president of Dropsie College for Hebrew and Cognate Learning, Philadelphia.