man, James Smithson, bequeathed to the United States of America a fortune of more than half a million dollars "to found at Washington under the name of the Smithsonian Institution an establishment for the increase and diffusion of knowledge among men." Thus was created one of the first and greatest scientific institutions of the New World. We who are concerned with the foundation and development of the Bermuda Station wish to emulate the example of James Smithson and to establish here in this British Colony, this island paradise, an institution "for the increase and diffusion of knowledge among men," and to this end we invite the cooperation of governments, foundations, universities and individuals. What other objective is more worthy of high endeavor and great endowment?

This institution is not finished, but only begun. Its long period of incubation under the supervision of Dr. Mark has finally led to its birth in this beautiful and strategic site. Before it, let us hope, lies immortal youth and growth, and ever widening usefulness in the highest service to mankind!"

President Conklin then inducted the new director into office in the following words:

John Francis George Wheeler, B.Sc. and D.Sc. of the University of Bristol and formerly lecturer in the same, student at the Plymouth Laboratory of the Marine Biological Association of the United Kingdom, investigator for the Ministry of Agriculture and Fisheries, zoologist with the *Discovery II* Expedition to South Georgia and South Africa in 1924–27, and again in 1929–30, for the last year in charge of the *Discovery II* office in London, author and co-author of notable monographs on Southern Blue and Fin Whales—By the authority and in the name of the trustees of the Bermuda Biological Station for Research I induct you into the office of director. I charge you to remember that this is a cooperative and not a one-man institution. I bespeak for you and for Mrs. Wheeler the cordial friendship of the people of Bermuda, and I pledge you the support of the corporation and trustees in the further development of this station.

Dr. Wheeler responded in a brief address, in which he said that he was deeply conscious of the great honor and responsibility that had been conferred upon him. He felt that he and his wife had joined a family community in Bermuda and he realized that he was following in the steps of a long line of scientists who had labored to establish the Bermuda Station. There was, he said, a wonderful opportunity for scientific work here, for the ocean abounded with life and it was the duty of scientists to study that life and to make their studies of service to mankind. He spoke particularly of the many correlations of plants and animals in the sea and illustrated this by his studies on the whales of the Antarctic, and then pointed out the bearing of all these correlations on the whaling industry and the manufacture of soap. He ended by expressing his confidence in the support of the board of trustees and of the government and people of Bermuda.

At the conclusion of this ceremony guests were invited to inspect the various aquaria, laboratories, library and living rooms at the station and to partake of tea and refreshments in the main hall and dining room. Thanks to the spacious quarters and to the interesting exhibits it was possible to entertain the entire company in a satisfactory manner.

The concluding paragraph of the extended account given in the *Royal Gazette and Colonist Daily* may be quoted as an indication of the general impression in Bermuda of the new biological station:

And so concluded an event that marks an era in the history of Bermuda. Everyone present was deeply impressed with the importance of the occasion and there is little doubt that the Bermuda Biological Station is destined for a great future. To all those who have contributed to its foundation Bermuda owes a debt of gratitude difficult to express or repay.

E. G. CONKLIN

PRINCETON UNIVERSITY

SCIENTIFIC APPARATUS AND LABORATORY METHODS

A CONVENIENT PREPARATION FOR THE REMOVAL OF HAIR

THE depilatory, reported in this paper, has been used in my laboratory for some time. At the suggestion of some colleagues, I have decided to describe the method used for preparing it.

This preparation is *very toxic* if injected subcutaneously or intraperitoneally into white rats or guinea-pigs. There, however, are no apparent toxic effects when it is used for removing hair from large areas on laboratory animals.

There are several advantages in using such a hair remover: (1) inexpensiveness, (2) ease of preparation, (3) quick action, (4) a smooth unscarred area which is necessary in certain types of investigation, and (5) the activity does not decrease markedly on standing.

EXPERIMENTAL

The apparatus consists of three one-liter flasks, one one-hole rubber stopper, one two-hole rubber stopper, glass tubing and rubber tubing for connections. The arrangement of the apparatus is shown in Fig. 1.

Hydrogen sulphide is generated by means of ferrous sulphide and hydrochloric acid in flask No. 1. The gas passes through flask No. 2, which is about

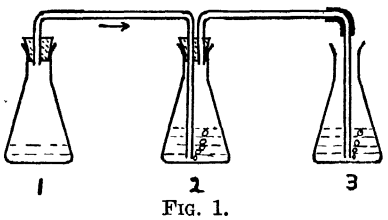


FIG. 1.

one half full of distilled water. Flask No. 3 contains an aqueous solution of barium hydroxide.

The following preparation keeps its activity very well and removes hair in 3 to 5 minutes from areas large enough for ordinary operative purposes. Forty grams of powdered barium hydroxide were added to flask No. 3, which contained 500 cc of distilled water. The contents of the flask were agitated occasionally during several hours in order to insure solution (an electric stirrer would cut down the time and eliminate the shaking). The hydrogen sulphide was generated by treating one ounce of granulated ferrous sulphide with 200 cc of 1–2 hydrochloric acid. The gas was washed by means of the water in flask No. 2 and passed directly into the aqueous solution of the barium hydroxide, which was agitated continuously for the first few minutes and then at intervals of a few minutes. The hydrogen sulphide was allowed to pass into the solution for thirty minutes or until the supply was practically exhausted. The apparatus was disconnected and twenty-five grams of powdered barium hydroxide were gradually added while stirring the solution. After testing the solution for its activity by means of laboratory animals (a small area on one's arm may be used), it was stored in a brown bottle.

The application of the depilatory must be attended with some precaution since the solution will dissolve the nails and cuticle as well as the hair. If one will take 25 to 50 cc of the solution in a beaker and apply it gently by means of a small piece of gauze and a pair of forceps, he will obtain good results. If the coat of hair is heavy, it will be necessary to keep adding fresh solution from the beaker for several minutes. A tongue depressor, spatula or some blunt-edged instrument may be used to gently remove the most of the dissolved hair. The animal is held under a stream of warm water in order to wash off the depilated area and free it from the barium solution. It is best to keep the animal in a warm place until dry and longer if the depilated area be very large.

DISCUSSION

Since the solution was found to be toxic if administered subcutaneously or intraperitoneally, one might expect that it would be injurious if it were used for removing hair. It, however, has been used on dogs, rabbits, guinea-pigs and white rabbits without any apparent deleterious effects.

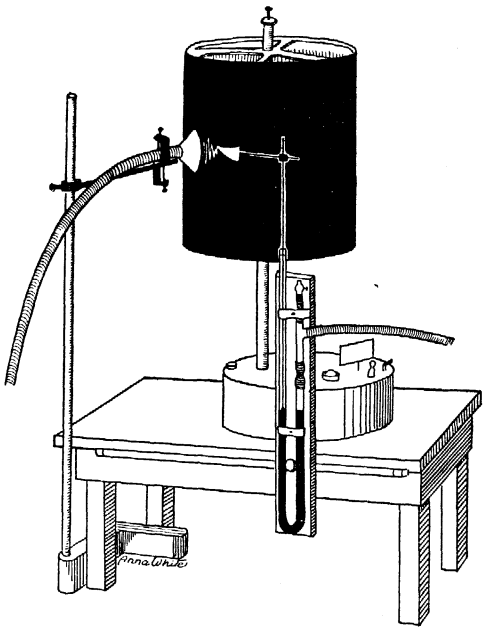
The depilated areas seemed to grow hair at a slower rate than similar areas which were shaved.

The solution, made according to the method as described above, will retain its activity for several months. The quantity of barium hydroxide treated with hydrogen sulphide and the quantity of barium hydroxide added to the treated solution can be varied somewhat without markedly affecting the activity of the depilatory. One solution, containing approximately the same amount of barium hydroxide as used in the above method, was quite active after standing for one year.

EMMETT B. CARMICHAEL
SCHOOL OF MEDICINE,
UNIVERSITY OF ALABAMA

AIR CONTROL OF MANOMETER WRITING POINTS[1]

ARTERIAL and venous pressures are often recorded on a smoked drum by means of a writing point attached to a float. Various devices are used to keep the writing point in contact with the drum in such a manner that a clear tracing will be obtained without so much friction that the recording of pressure changes will be interfered with. This is a simple matter with mercury manometers but when water manometers are used it is often very difficult to obtain a good tracing. A simple method of keeping the writing point against the drum with a delicate but even pressure is shown in the accompanying illustration. A stream of air is blown against the writing point, pressing it against the drum. By regulating the air current the contact of the writing



[1] Demonstrated at the meetings of the Federated Biological Societies at Montreal, 1931.