Miscellany.

ARTIFICIAL CAMPHOR.

PRIOR to 1828 chemists made a sharp distinction between organic and inorganic compounds, it being supposed that the latter are capable of preparation in the laboratory, while the former are formed only in the living organism, animal or vegetable, under the influence of a particular force — the life force. This view was rendered untenable by Wohler's discovery that urea, a typical secretion of the animal organism, can be prepared synthetically from cyanic acid and ammonia, two inorganic compounds. Many other "organic" compounds, such as acetic acid, lactic acid, glycerin and sugar have since been made synthetically, and as our knowledge of chemistry increased the old idea about a vital force has lost greatly in significance. We know now that the same chemical forces act both in the organic and inorganic worlds. It is well known that most of the vanilla extract now found on the market is not derived from the vanilla bean, but from coal tar. This coal tar furnishes a large number of other substances which are used in medicine and in the arts. Among these may be mentioned the various analgesics, aniline dyes and perfumes. Indigo and alcohol have also been made from their inorganic constituents, and recently chemists have discovered a method of making camphor synthetically, which makes the manufacture of this substance a profitable industry. Camphor has the formula $C_{10}H_{16}O$, and is an organic compound which was formerly derived only from the camphor-tree *Cinnamomum camphora*, by distilling the chips with water and purifying the product by sublimation. The camphor trees have, however, been growing scarce, and as a result the price of camphor has of late been very high. Japan has a monopoly on the natural product, but this monopoly has now been broken by the manufacture in this country of artificial camphor from turpentine. Turpentine has the formula of $C_{10}H_{16}$ and can be oxidized to $C_{10}H_{16}O$ by heating it with oxalic acid. A ton of turpentine is heated at one time with a quantity of oxalic acid, and out of this mixture is distilled the purest variety of camphor. It takes fifteen hours to complete a lot, and the yield of camphor is 25 to 30% of the weight of turpentine. Various other valuable oils are obtained at the same time as by-products. — *Journal American Medical Association*.

Correspondence.

THE BICYCLE AS A THERAPEUTIC AGENT.

CLEVELAND, OHIO, Jan. 20, 1904.

MR. EDITOR: I was very much interested in the valuable article entitled, "The Bicycle as a Therapeutic Agent," contributed by Dr. L. H. Gulick, and which appeared in the JOURNAL of Jan. 14, 1904.

While reading the article it occurred to me that it might be of interest to relate the use that I have made

of the tricycle for the treatment and cure of congenital flat foot or weakened arch in children. When this condition is early observed I recommend the parents to secure for the child a small tricycle, allowing the child to run it about in the house, and also on the sidewalk and street. The results are more certain and satisfactory if the child is kept in bare feet during the warm months. If the vehicle is furnished the child at the beginning of the summer it is not only surprising how much time the tot will spend in the saddle, but better yet, the season often serves to effect a complete cure before the novelty has worn away. This simple measure has been so uniformly successful in relieving the condition that I now never prescribe anything else. It serves the double purpose of taking the weight of the child off the weakened arch, but also is a very potent means of exercising and developing the muscles of the foot and thus gradually but certainly building up a natural resistance to the weakness.

Very truly yours,

CHARLES J. ALDRICH, M.D.

THE EMBRYOLOGICAL COLLECTION OF THE HARVARD MEDICAL SCHOOL.

HARVARD EMBRYOLOGICAL LABORATORY,
688 Boylston St., Boston, Jan. 23, 1904.

MR. EDITOR: May I have the privilege of appealing through your columns for assistance from practitioners in building up the Embryological Collection of the Harvard Medical School? We are very desirous of obtaining as large a number as possible of human embryos of the first, second and third month, that is, up to about three inches in length, measured from the crown to the breech. For our purposes it is important that the specimens be placed as promptly as possible in a preserving fluid. We recommend as a preservative 10% formalin, that is, ten parts formalin with ninety parts water. This mixture is readily obtainable at any apothecary's and gives good results. The laboratory will pay all expenses incurred in preserving and forwarding specimens.

The collection comprises at present sixteen series of sections from human embryos. Each series is carefully catalogued, and all the sections in the series are counted, so that any section can be immediately found by its number. The collection also includes to this date 180 series of other mammals, and over 600 series of the lower vertebrates, all representative types. As we have now good sets of series of sections of pig, rabbit and cat embryos, it has become more important than ever to secure a good set of the human series, so that it will afford a complete demonstration of the early development of man. Such a collection is possible, as is shown by the success of Prof. William Reis at Leipzig. Its scientific value can hardly be overestimated. With the generous assistance of practicing physicians the requisite specimens can be secured, and I think that the Laboratory can pledge itself to make the best use of all material received, especially as it has now the great advantage of the services of a workman who has become skilful and reliable in the cutting of serial sections.

The Harvard Embryological Collection is intended primarily as an aid to original research. Its use is by no means restricted to the officers and students of the Laboratory, but on the contrary it is opened freely to all competent investigators, who wish to profit by its advantages. I have the honor to remain,

Yours respectfully,

CHARLES SEGWICK MINOT.