

illustration, the cover and the dish will each bear the same number cut in glass, so that the student, working at his desk, may easily avoid mixing the covers which would not only be detrimental by mixing incompatible fluids; but, as each lid can be ground only to fit the dish which accompanies it, exchanged lids will not fit tightly.

In order to facilitate cleaning and to avoid inaccessible corners, all the corners are rounded.

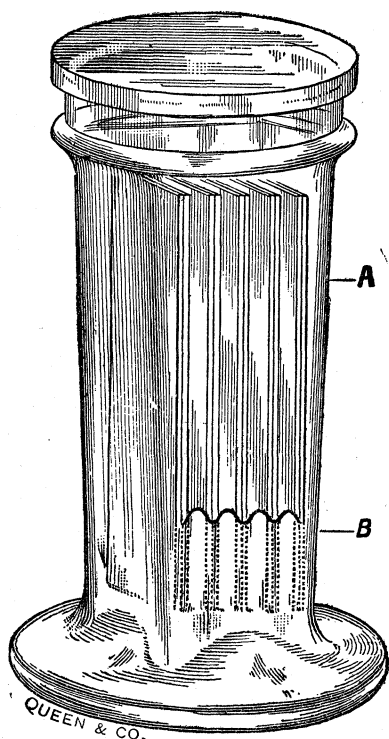


FIG. 1.—This cut is about $\frac{2}{3}$ of the exact size of the dish. At A can be seen ten (10) slides, placed back to back and passing down between the ribs at B. Since this figure was drawn the width of the base has been increased, so that the base is now the width as shown in Fig. 2.

The advantages claimed for the dish are: (1) Convenience, in that a number of slides can be safely handled at one time. (2) Great economy in the reagents; not only is the amount used less than is required by the use of Stender dishes, but in

case, as will not uncommonly happen with students, anything occurs which ruins the contained fluid the loss may be materially less. (3) Solidity: no other dish of the same height and the same capacity possess the same solidity. (4) Contained fluids are prevented from evaporating by the tight-fitting top. This is not secured in the Naples dish.

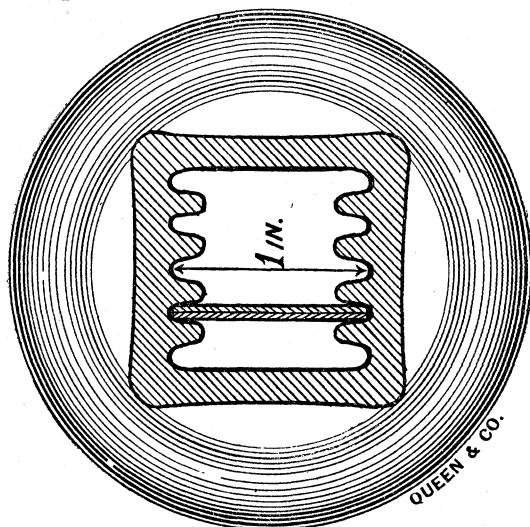


FIG. 2.—This represents a transverse section of the dish at the point marked B in Fig. 1. In this view we are looking down into the dish from above; the ribs and the intervening grooves are shown. The two arrows mark the position in which the ribs are lying and the two points, between which it is exactly 1 inch. Just to the left of the arrow is shown a transverse section of two slides placed back to back, as is usually done for staining.

I desire to express my appreciation of the help given me by Messrs. Queen & Co. in securing working drawings from which the above cuts have been made.

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NOTES ON INORGANIC CHEMISTRY.

THE address of Professor William Ramsay, President of the Chemical Section of the British Association at Toronto, was out of the usual order. It was entitled 'An

undiscovered gas,' and narrated a search for an element with the atomic weight of 20, lying in the periodic system between helium and argon. Many 'triads' are found in the periodic system, with a difference in atomic weight of about 36 between the extremes; viz.: fluorin, chlorin, manganese, 19-55; oxygen, sulfur, chromium, 16-52; nitrogen, phosphorus, vanadium, 14-51.4, etc. If argon has an atomic weight of 40 and helium of 4 there might be expected a triad here, with a middle element of atomic weight about 20. Professor Ramsay and his assistant, Mr. Travers, made a diligent search for this element, which would, like argon and helium, probably be an indifferent gas. The gases from various minerals and mineral springs were carefully examined in vain. Helium was then fractionated by diffusion through porous plates. After 180 diffusions two fractions were obtained, the larger portion having a constant density of 1.98, that is pure helium, while the smaller portion had a variable density, and was finally proved to be helium with a small portion of argon. This search also proved fruitless. The non-existence of the gas is, however, not proven; helium itself in fergusonite, one of the minerals which yields it in reasonable quantity, is present only to the extent of 33 parts in 100,000, and if the new gas, as is by no means improbable, occurs far less abundantly than helium it will be a work of extreme difficulty to separate it from helium or argon.

In the last *Chemical News*, G. G. Boucher describes a possible new element in cast-iron. He has found it to the extent of a few thousandths per cent. in the residues left after dissolving iron in sulfuric acid. The metal seems to possess some of the reactions of tungsten and of antimony, but has not yet been identified with any known element.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

MEETING OF THE TRUSTEES OF THE MARINE BIOLOGICAL LABORATORY.

A MEETING of the Trustees was held at Woods Holl, Mass., upon Friday, September 10th. Thirteen members of the Board were present, including the Director, Professor Whitman; Professor Clarke, of Williams; Professor Macfarlane, of Pennsylvania; Professor Osborn, of Columbia; Mr. E. G. Gardiner, of Boston; Professor Bumpus, of Brown; Professor Penhallow, of McGill; Professor Metcalf, of Baltimore; Professor Patten, of Dartmouth; Professor Conklin, of Pennsylvania; Professor Morgan, of Bryn Mawr; Professor Peck, of Williams; and Mr. C. G. Kidder, of New York. The first business was the election of a President in place of Professor Farlow, of Harvard, resigned, and Professor Osborn, of Columbia, was chosen by ballot. Mr. D. Blakeley Hoar, of Boston, was elected Treasurer in place of Mr. Laurence Minot, resigned, and a resolution was passed gratefully acknowledging Mr. Minot's long and generous services to the Laboratory during the past four years. Professor Bumpus, clerk of the corporation, was elected Secretary. According to the new By-Laws, the business of the Trustees will be largely transacted by an Executive Committee, which consists of the principal officers of the Association and three members at large. This Committee was constituted for the coming year as follows: at large, Messrs. Gardiner, Peck and Kidder; and *ex officio*, Messrs. Osborn, Whitman, Bumpus and Hoar. The powers of the Executive Committee were carefully defined and limited, and this Committee was instructed to keep formal record of all its business and report to the Trustees at each meeting. A very full report of the financial condition of the Laboratory was received from the retiring Treasurer, Mr. Laurence Minot, and presented, with an analysis of the receipts and expenditures of the last season, by Mr. Kidder. It was shown that the Laboratory is practically self-supporting, but that the interest and other general charges cause an annual deficiency, which must be met by special subscription. The report of the Director was deferred until the next meeting of the Board. Two important Committees were chosen,