School of Medicine. To emphasize and assure the scientific character of this school, it is not organized separately from the Ogden Graduate School of Science, but within that school as a part of it.

IT was stated in SCIENCE that Dr. A. Ross Hill had been elected president of the University of Oklahoma. Dr. Hill was offered the presidency some time ago, but was unable to accept. Dr. J. S. Buchanan, acting president since the resignation of Dr. Stratton D. Brooks to accept the presidency of the University of Missouri, was elected president at the meeting of the Board of Regents held on June 3.

C. M. CARSON, director of the department of chemistry, has been appointed acting president of the Michigan College of Mines, to succeed the late Dr. F. W. McNair.

N. HENRY BLACK, of the Roxbury Latin School, Boston, has been appointed assistant professor in Harvard University to teach physics and to organize courses on science teaching in the Graduate School of Education.

DR. R. B. STREETS, of the University of Wisconsin, has been appointed assistant professor of plant pathology at the University of Arizona.

DR. IVAN C. HALL, of the University of California, has been appointed professor of bacteriology at Cornell University, Ithaca.

DR. P. W. WHITING, research associate professor of eugenics, of the Iowa Child Welfare Research Station, has resigned to become professor of biology at the University of Maine.

E. A. MILNE, assistant director of the Solar Physics Observatory at Cambridge, has been appointed to the Beyer chair of applied mathematics at the University of Manchester.

## DISCUSSION AND CORRESPONDENCE

### THE USE OF SEA SALINES IN THE TREATMENT OF GLANDULAR (INCLUDING UNDOUBTEDLY GOITROUS) ENLARGEMENTS—HISTORICAL NOTES

IN a previous discussion upon the relationship between the purity of our dietary condiment known as "common salt" or "table salt" and the existence of endemic goiter, the writer believes he was the first one to draw attention (see this Journal, LIV, No. 1389, p. 131, August 12, 1921) to the significance of the geochemic phenomenon by which iodine has been largely leached from the soil of many localities and to the significance of the source of our present-day article, derived, as it is practically altogether, from inland deposits and brines rather than from sea water and "alkali" mineral springs, as was the former-day custom. I also pointed out the possible desirability of using a condiment consisting of total sea salts or even sea water in place of our table salt. The full results of my inquiries in this direction were published in the *Jour. Am. Med. Assoc.*, Vol. 78, 18–21, Jan. 7, 1922.

In the spring of 1922, Professor Raymond C. Osburn gave me an interesting reference from "Buckland's Log Book of a Fisherman and Zoologist," London, 1883, p. 161, to wit:

> Just one hundred and twenty years ago a very small but very remarkable book was published. The title of it was "A dissertation on the use of sea water in the diseases of the glands, particularly the scurvy, jaundice, king's evil, leprosy and the glandular consumption," translated from the Latin of Richard Russell, M.D., by an eminent physician. "The sea washes away all the evils of mankind," *Eurip., Iphig. in Taur.*, v. 1193. London: Printed at Homer's Head, Temple Bar; and R. Goadby at Sherbourne, 1752.

It has appeared to me that some excerpts from Russell's book, necessarily unscientific as they are, might prove of interest, both historically and otherwise at the present time, especially in regard to the use of sea foods and sea salt in the preventive treatment of endemic adolescent goiter and perhaps other "deficiency diseases" which were, of course, unrecognized as such in his day.

Russell's original work was entitled *"De tabe glandulari, sive de usu aquae marine in morbis glandularum dissertatio;" 3 p. l.*, 3–235 pp., 7 pl. 8° (oxoniae). *J. Fletcher et J. et J. Riverton*, 1750. At least four editions of this work, translated into English, appeared under dates as follows: 1752, 1753, 1760 and 1769. The edition of 1753 reached 398 pages. That of 1760 contained also "A translation of Dr. Speed's commentary on Sea Water." The following are taken from the 3rd English edition (1760):

> By sea water joined with other medicines, the Glands may be successfully purged, and freed from Obstruction —p. 7.
>
> The Patient will bear the Stimulus of the Sea water six months and, in Disease of Skin, I have known a Patient bear it tolerably well for a whole year. * * * But Sea Water will heal many Diseases where Mercury is of no service—page 8–9.
>
> Drink a pint of Sea water next A. M., (for gonorrhoea)—p. 61.
>
> [Dr. Speed] As the Use of Sea Water has grown in Fashion * * * I determined to try Experiments on the waters that washed the shores of that County [Hampshire]—p. 145.
>
> The Ancients were very cautious in giving it inter-

nally and Dioscorides (*Med. Mater., lib. V, cap. 23*) acknowledges sea water was given internally as a purge by itself. He recommended: Equal parts of Honey, Sea and Rain Water: also Wine made with sea water to purge the body, also to relieve those who spit purulent matter, and those that are costive. * * * In *de Parabilibus,* he affirms that sea water drank with Oxymell will break internal abscesses.—p. 150.

Half a pint of Sea Water drank at night going to Bed repeated in the Morning, is generally enough for Adults—p. 153.

For the glands of King's evil—operate and use Sea Water both internally and externally (as embrocations). [Many case reports given]—p. 156.

From what has been said it will appear that this method of cure is no invention of the Moderns, but was known to the Father of Medicine while it was in its infancy—p. 171.

It would appear, therefore, that the idea of using sea water or sea salts for medicinal and health purposes was a custom well established in former times, but one which a careful examination of medical and health literature of the present day shows has been quite discarded (in favor of "purified products"). Instead of the "old fashioned salt" derived by evaporation of sea water and retaining a trace or more of the thirty-odd elements said to be present in sea water, entirely new and also far cheaper source-methods of salt supply (from mines and brines of inland sources) is now the plan, and as a result we have a purified article, *sodium chloride.* Thus, as I have suggested in my previous articles, we have possibly created a condition of iodine and other elemental starvation purely by our commercial procedures. Should we not pursue a "back to nature" plan in this matter, as is advocated in connection with some of our vitamin-free food articles? Necessarily more scientific investigation is still essential to substantiate this, but observational evidence on all sides is strongly in support of it.

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## THE CURE AND PREVENTION OF EAR CANKER IN RABBITS

ONE of the many serious chronic diseases of rabbits that may interfere with the use of this animal in laboratory work is "ear canker." This disease may seriously handicap or cripple research, especially experiments requiring months or years of observation on the same animals.

Ear canker is caused by an animal parasite (*Psorocoptes cuniculi*) which closely resembles the mite (*Sarcoptes cuniculi*) causing scabies. Curiously, it attacks only the concha of the ear. The earliest manifestations of infection are indicated by hyperemia and the formation of reddish brown crusts near the bottom of the concha. The hyperemia and crust formation extend and after months may involve nearly all the inner surface of the ear. The most serious complication of the disease is pyogenic infection of the middle ear which may extend to the internal ear and meninges. The parasite spreads more rapidly during the warm months. The disease is widespread, and few, if any, laboratories escape its occasional introduction.

The usual methods prescribed for treatment involve isolation and are elaborate and costly. For many years we have been treating the infection in important animals by the time-honored plan of removing the crusts and swabbing the concha with glycerine containing 2 per cent. carbolic acid. This method, as with many others of the same type, is tedious and time consuming. Last June (1923) when the laboratory was heavily stocked an extensive outbreak occurred, both in the old and the young stock. In casting about for some quick means of attack, we decided to try kerosene on account of its powerful insecticidal action. This was sprayed into the ear with a small De Vilbiss atomizer. Each ear received the amount of kerosene spray discharged from three or four compressions of the bulb or sufficient to moisten only the inner surface of the ear. The ears were sprayed twice, with an interval of six days. At the end of two weeks all the rabbits were cured of the infection and no case has since developed in our rabbit colony, averaging about 200 animals. It is doubtful whether the second spraying was necessary.

We have been prompted to call the attention of other laboratory workers to this well-known infection for the following reasons: (1) This experience was one of the most striking therapeutic effects in mammals we have ever witnessed; (2) Kerosene spray affords a specific, cheap, simple, rapid and certain means, both of curing and preventing the disease.

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## THE MEANING OF CONSERVATION

IN an article entitled "Two kinds of conservation," published in *The Scientific Monthly* for March, 1924, Dr. E. E. Slosson makes a statement which, in my opinion, is likely to help to perpetuate an old misconception of the meaning of conservation as applied to natural resources—a misconception which Dr. Slosson probably does not share. The likelihood is increased by the fact that the statement is strikingly clear and forceful—as is usual with what Dr. Slosson says—and is almost but not quite correct.

Dr. Slosson says, "The conservation of oil means not using it, for all the oil that is used is forever lost.