

called trichloroacetic acid, Dr. Brady said. This substance acts to coagulate the organic material in the tooth and block any further penetration by the acids of decay into the interior of the tooth.

Nature has her own way of doing just this, under favorable conditions.

When decay starts, a defense may be made in the form of a barrier of calcium deposit across the path of the penetrating acids. In laboratory tests, it has been found that acid strong enough to destroy all the rest of the tooth, will leave that defensive calcium deposit.

Science News Letter, January 25, 1936

MEDICINE

New Insulin Treatment Makes Diabetic More Nearly Normal

Supplement to Ordinary Insulin Promises To Make Adjustment of Carbohydrate Balance Easier for Some

THE "most valuable discovery in the treatment of diabetes since the original discovery of insulin" is announced in *The Journal of the American Medical Association*. (January 18)

A new preparation—protamine insulin—insulinate—is the answer found by Danish investigators to the problem of the many persons with a severe diabetes which cannot be controlled satisfactorily with insulin alone.

Protamine insulin does not supplant ordinary insulin in the treatment of diabetes but serves as an adjunct to it. The two must usually be used in the same patient at different times each day.

For example, a person with diabetes can employ the quickly acting old insulin in the morning with a heavy breakfast and the slowly acting compound at night before a light dinner.

That is what has been done at the Steno Memorial Hospital, Copenhagen, Denmark, where Dr. H. C. Hagedorn and his associates have developed the new preparation. A similar procedure is being followed by Dr. Howard F. Root and associates at New England Deaconess Hospital, Boston, where the new preparation is also being tested.

"It would appear as if a new revolution in the treatment of diabetes must follow and the possibility created for the diabetic patient to resemble more closely a normal individual," writes Dr. Root and his co-workers, Drs. Priscilla White, Alexander Marble and Elmer H. Stotz.

"While the majority of persons with diabetes are able to adjust their carbohydrate metabolism satisfactorily by the injection of insulin several times a day, many have so delicately balanced an

equilibrium that it is readily disorganized by slight overdosage or underdosage of insulin," the *Medical Journal* explains. "Wide fluctuations in blood sugar occur in these patients."

The Danish investigators have combined insulin with protamines, which are elementary compounds of amino acids containing one or more of the substances lysine, arginine and histidine. The resulting compound is relatively insoluble and tends to be absorbed slowly and over a longer time than ordinary insulin. The blood sugar lowering effect lasts about twice as long.

In presenting the work of both the Danish scientists and of Dr. Root and his associates in Boston, *The Journal of the American Medical Association* emphasizes several facts:

Protamine insulin is still a labora-

tory preparation and is not yet commercially available.

The compound is somewhat inconvenient in that it must be prepared shortly before use, as it is stable at most for only a few weeks.

It does not supplant insulin but serves as an adjunct to it.

It is of no special value to persons who are now adequately treated with insulin.

Fifteen cases treated in Boston in general confirm the excellent results reported in the eighty-five cases reported from the Danish hospital.

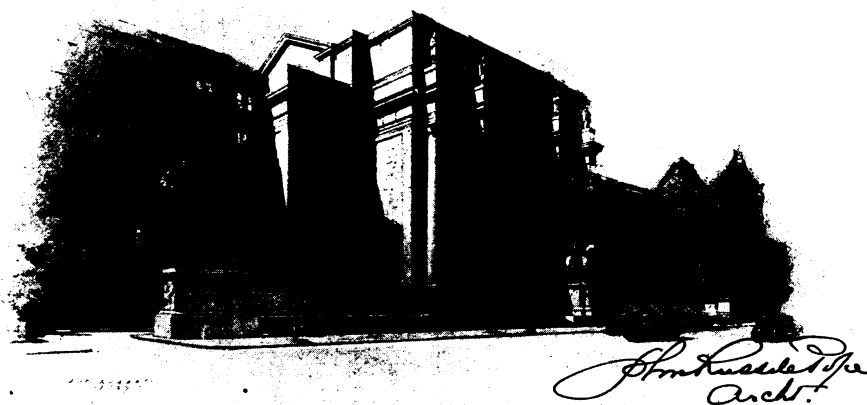
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ZOOLOGY

Roosevelt Memorial Hall Honors Love of Wildlife

WILDLIFE in all its phases has an inseparable connection with the name Roosevelt. As legitimate quarry for hunting, as a vital part of the national heritage to be conserved against the effects of too much civilization, as a life-complex worthy of scientific field study, wildlife has long had the close attention of members of this most prominent American family.

Roosevelt significance to wildlife is brought to a new focus with the dedication of the New York State Roosevelt Memorial at the American Museum of Natural History in New York City, which took place on Sunday, Jan. 19. In this new great hall, appropriately near the hall dedicated to his friends and collaborator, the late Carl Akeley, Theo-



NEW YORK STATE ROOSEVELT MEMORIAL