result if we agree to read the superscript first and the subscript second, as suggested above.

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SUGGESTED NOMENCLATURE FOR HEAVY HYDROGEN AND ITS COMPOUNDS

THE suggestion of Professor Wood in the issue of SCIENCE for December 8 to designate heavy hydrogen atoms by the term "bar-" will not meet the complications which will arise when organic compounds of this substance are prepared. Thus 12 "bar-benzols" are possible, depending on the number of heavy hydrogen atoms in the molecule. It is almost inevitable that some special name will have to be given to the heavy hydrogen atom in order to incorporate that name in suitable form in the names of organic compounds. "Deuterium" would seem to be as good a name as any. In this laboratory we are much interested in the highly symmetrical molecule, neopentane (tetramethylmethane). "Bar-neopentane" might apply to any of 34 theoretically possible compounds. When we are successful in our attempts to make a neopentane containing one heavy hydrogen, we shall call it either "deutero-neopentane" or "neopentyl deuteride."

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LIGHTNING PROTECTION FOR TREES

ON page 507 of SCIENCE for December 1, 1933, there appears a discussion on lightning protection for trees by Professor J. B. Whitehead, which lays down four principles upon which Dr. Whitehead believes that scientists are generally agreed. Two of these principles are in such violent contradiction to the views of most present-day specialists on this subject that I think attention should be called to the matter. The two principles are stated as follows:

(1) The protective value of a lightning rod is in its ability to discharge continuously and so prevent an abnormal rise of potential gradient as related to an overhead cloud.

(3) The points of a lightning rod should be relatively sharp to permit steady leak and suppression of the high potential gradient.

Experiments upon a laboratory scale give some justification for the idea that the point discharge will prevent the building up of sufficient potential to cause a disruptive discharge. Upon the scale met with in nature, the point discharge appears utterly incapable to prevent such an upbuilding of potential, which often occurs in a very short time. Professor Whitehead recognizes that the many dozens of points on the top of the Washington Monument have been unable to prevent it from being frequently struck.

Most of those who have given considerable study to this problem recognize that the discharges from the points of lightning rods have little, if any, value in preventing a stroke of lightning, and that it is not important that the points should be sharp.

The National Fire Protection Association, the American Institute of Electrical Engineers and the National Bureau of Standards have had committees working on this problem for many years and a Code for Protection against Lightning has been produced, which has the approval of these bodies and also of the American Standards Association. The 1932 edition of this code contains the following statement:

> The sole purpose of lightning rods . . . is to protect a building in case a stroke occurs, there being no evidence or good reason for believing that any form of protection can prevent a stroke.

The first principle stated by Professor Whitehead was at one time widely held but is now thoroughly discredited.

General experience with lightning rods indicates a high degree of protection. The differing opinion as to the value of the lightning rod now exists mainly in the minds of those who have not investigated actual experience with such installations. Failure to protect is usually found to follow failure in proper installation or maintenance. A typical cause of failure is a discontinuity in the conductor which makes connection to the ground.

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BRACHYCEPHALY AND GLANDULAR BALANCE

IN delving into ethnic geography, I have been struck by the fact that certain regions which have been breeding grounds of brachycephals are also conspicuous areas of endemic goiter. Searching further, I have found indications that certain other areas, conspicuous for brachycephaly, are reported as noticeably goiterous, although not included in the common lists.

It is common knowledge, moreover, that individuals who have removed from a non-goiterous to a goiterous area are much more subject to goiter than are the natives. Whether individuals of stocks which have resided in a goiter area for only a few generations are more subject to goiter than are auchthones, is not reported; but there are some indications that this is true. If so, certain other regions, agreeing in general character with goiter areas, but into which there