

ally being extended further. A railroad or factory which followed such a policy and allowed the quality of its staff to deteriorate, while continually absorbing new capital and expending it on new lines instead of on strengthening those already existing, would inevitably go bankrupt.

Let us face the facts. The universities are not now attracting ability into their faculties. Exceptions occur, but this is the rule. If the universities want a higher intellectual level, they will have to pay for it.

What, then, are the market prices of ability, mediocrity and inferiority? The Yale report shows that, as a general rule, at least in cities where it snows in the winter and houses have to be heated, the total annual living expenses of any family are about half the sale value of their residence. This rule applies fairly closely to the various grades of professional and business men, to clerks, mechanics and laborers, as well as to professors. It rests on the facts that 20 per cent. of the total annual expenditure of a household, or a little more, always goes for rent, real or virtual, and that a house or apartment rents for about 10 per cent. of its sale value. Thus a man's annual salary is about half the sale price of the house he can live in comfortably on that salary, and provide for his family.

From these relations it follows that, if a university wants a certain level of ability on its faculty, it is only necessary to get from the tax assessor's office the values placed on the houses in which live the economic class with that level of ability. It may be that of the leading lawyers, doctors, bankers and business men of the town, or merely the general run of the legal and medical professions; or bank clerks; or policemen; or day-laborers. Whichever it is, half the valuation of their homes is the approximate market price in that town for the corresponding level of ability.

Application of this principle to the present salary scales in our universities reveals the underlying cause of the increasing demand for "better teaching." This need is not met, but is rather increased, by each additional million now devoted to expansion. More teachers for smaller classes, new educational devices, additional departments, schools and institutes, larger and more imposing universities are all poor substitutes for a faculty of a high level of intellectual energy.

YANDELL HENDERSON

YALE UNIVERSITY

ROUNDSTONE, A NEW GEOLOGIC TERM

EARLY in 1918, in the course of my work in the editor's office of the U. S. Geological Survey, I jotted

down half a dozen quotations that showed considerable differences among geologists in the use of the words boulder, cobble, pebble and occasionally gravel, to indicate sizes of rounded fragments. Four years later C. K. Wentworth published in the *Journal of Geology* his schedule of grade terms, which is a sufficient guide to uniformity in that respect.

I wish to offer now, from my notes of 1918, the new term *roundstone* as a generic term to include the largest four sizes in Wentworth's schedule, boulder, cobble, pebble and granule. This term would be useful to designate the unsorted accumulations composed of two or more sizes of rounded stones that occur in many situations. It could fill the place incompletely filled by two or three terms in such statements as "all the pebbles and boulders are within a few feet of the surface"; "the largest patches contain gravels and cobbles at the base," and "the pebbles, cobbles and boulders were collected in groups of ten to seventy."

FREDERIK A. FERNALD

THE USE OF PARADICHLOROBENZENE IN THE CONSERVATION OF HERBARIA

DURING the past years we have been using paradichlorobenzene in substitution of naphthalene, in the conservation of the phanerogamic and mycological Herbaria of the Agronomical Station, with excellent result.

This substance, contained in test-tubes, was placed upon each drawer of the iron boxes, but there is no inconvenience in dusting it directly upon the plants placed on the Herbaria boards.

A comparative experiment was made with samples of *Cassia* and *Tipha*, which get easily damaged in the Herbarium.

Having dried some specimens and divided them into three lots, they were set in a place exposed to dust and moths. A first lot was left without any preserving substance; a second one was placed together with naphthalene dust on the cardboards, and the third one with paradichlorobenzene—the two latter with the same amount of preservative, by weight.

At the end of a year, the samples left without preservatives were almost totally destroyed; the ones treated with naphthalene were partially destroyed, especially the flowers and inflorescences, and the ones treated with paradichlorobenzene were not attacked.

The use of this substance, as compared with naphthalene, shows the necessity of replacing same more frequently on account of its easier volatility.

R. CIFERRI

AGRICULTURAL EXPERIMENT STATION MOCA,
DOMINICAN REPUBLIC