place of the tiger and other big game, which have been transformed into fine rubber plantations, and now Malacca, which has for years been largely neglected, is in a flourishing condition. A short time ago there was no banking institution in the town of Malacca; to-day three banks are doing a good business, and the place is rapidly becoming an important center.

UNIVERSITY AND EDUCATIONAL NEWS

Jesse T. Bonney, of Norfolk, Va., leaves an estate of about $400,000, subject to the dower rights of his wife, to educational institutions for girls which he established. The widow's dower, which is one third of the whole estate for life, goes to the institutions after her death.

In May the Denver and Gross College of Medicine signed a contract by which it unites with the School of Medicine of the University of Colorado. The Denver and Gross College has discontinued the teaching of the first two years of the medical curriculum and on or before the first of January, 1911, will discontinue the teaching of the remaining years as well. A constitutional amendment permitting the university to conduct the last two years of the medical course in Denver will be submitted to the people of the state.

The following appointments have been made in the University of North Carolina for the coming session: Dr. Robert A. Hall, formerly assistant professor in Clemson College, associate professor of organic chemistry; Dr. James M. Bell, U. S. Bureau of Soils, associate professor of physical chemistry; Hampden Hill, instructor in analytical chemistry; Parker H. Daggett, of Harvard University, professor of electrical engineering; V. L. Chrisler, M.S. (Nebraska), assistant in physics in the University of Nebraska, instructor in physics; Guy R. Clements, instructor in Williams College, professor of mathematics; T. R. Eagles, professor of mathematics in Bethany College, West Virginia, instructor in mathematics. M. H. Stacy, formerly associate professor of civil engineering, has been promoted to professor of civil engineering and T. F. Hickerson has been advanced to associate professor of civil engineering.

Lawrence W. Cole, A.B. (Oklahoma), Ph.D. (Harvard), recently professor at the University of Oklahoma and instructor at Wellesley College and in the Harvard Summer School, has been appointed professor of psychology in the University of Colorado, to succeed Vivian A. C. Henmon, A.B. (Bethany), Ph.D. (Columbia), who has been called to the University of Wisconsin.

The Vienna correspondent of the *Journal* of the American Medical Association writes that there are at present vacant three important chairs for medical instruction, those of the deceased Schnabel and Zuckerkandl (ophthalmology and anatomy, respectively), and of von Strümpell (medicine), whose sudden resignation caused so much comment in all circles. The successors have been nominated already by the recommendations of the medical faculty of the university; and Professor Demmer, of Graz, will take over the eye clinic in October; it will be remembered that this place was refused by Hess on account of the insufficient endowment and little space in the old clinic whence so much original investigation had come. The chair of anatomy has been offered to Tandler, of Vienna, who will probably be appointed. The successor of Strümpell will be either Chvostek or Ortner, both Austrians and both in very good standing in medical circles.

DISCUSSION AND CORRESPONDENCE

THE TEACHING OF ELEMENTARY PHYSICS

To the Editor of Science: Physics teachers will, no doubt, read with considerable interest the discussions on the teaching of elementary physics which have been going on in Science. While I was not present at the Boston meeting nor on Professor Hall's mailing list, I should like to venture to comment upon his paper.

It seems to me that propositions 1, 2, 3 and 4 might very well be accepted, as well as first

four lines of No. 5. Proposition 6, also, is a good one. Propositions 7, 8 and 9 seem to me will eventually go by the board, as either unnecessary or wide of the mark. No. 8, for example, is an impossibility, as has been pointed out by Professor Magie.

I also find myself in agreement with those who would readily dispense with any high school physics for college students provided the student is mature, earnest and of general good training. It is not a question of having a previous knowledge of physics, but of capacity for plenty of hard work and of close application.

I am also inclined to sympathize with Professor Mann's position that the best judge of what a *high school* course in physics should be is the *high school* instructor himself. After all, is not the problem of high school physics one that the high school instructors should be allowed to work out independent of any overlordship on the part of the universities? There is, I believe, a justly growing resentment and impatience on the part of high school instructors at the dictation of the universities. The colleges and universities can well afford to let them work out their own four years' problem, asking only that such examples of their product as come up to the universities be creditable representatives of their labor. I am sure that the high school instructors are just as ambitious as the universities and colleges to show results, and I am inclined to believe that a good deal of the dictation on the part of higher education to the secondary schools handicaps instead of helps them. I am also inclined to believe that in letting the high school instructor have free scope with his high school course he should stop asking colleges and universities to give advanced credit to the high school students. It is for these reasons that it seems to me that propositions 7, 8, 9 and 6, also, are unnecessary, as well as the latter part of proposition 5.

The question of dynamics in section 9 is one which I hope the high schools would answer by teaching and not by omitting the subject of kinetics. It seems to me unfortunate for high school students to pass out into the world with no attempt at quantitative ideas in this subject, and that the high school teacher is likely to gain rather than lose by meeting the issue squarely instead of evading it merely because it is hard. While this is my view, I would be perfectly willing to leave the solution of this question, with all the rest of the high school course, to the high school teachers.

In closing I would express a hope, as does Dr. Hall, that the discussion may go on and not be closed even with his most excellent discussion.

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SCIENTIFIC BOOKS

Ancient Plants. By M. C. STOPES. Pp. viii + 198, figs. 122. London, Blackie & Son, Ltd. 1910.

This well-written and well-illustrated little book furnishes another striking illustration of the difficulty of writing in a non-technical way about a technical subject. As is usually the case, some aspects are made too primer-like while others are highly theoretical and out of place, as for example the concluding discussion in the present work regarding the probable future evolution of plants.

The work is well planned and the facts presented seem in general to bear close scrutiny, although many of the geological statements, while true for Great Britain or even western Europe, hardly apply to the rest of the world. The book is typically English, and will no doubt prove a very useful elementary text in that country. The author's frequent use of the phrase "microscopical standpoint" well serves to illustrate the point of view and explains her statement in the introduction that Williamson was the foremost contributor to paleobotany. No one will dispute Williamson's well-earned renown, but it is very doubtful if he would be considered the foremost contributor to even Carboniferous paleobotany outside of England, and his influence is more or less responsible for the neglect with which the splendid Tertiary floras of the south of England have been treated. Again Lindley & Hutton's "Fossil Flora of Great Britain" is