SCIENCE

quired further investigation and perpetual study as to how these people were to be treated when in the sanatoria. One of the greatest benefits, perhaps, of establishing these sanatoria would be in giving expert medical authorities the opportunity of carrying on investigations which would enable them in the future to deal with this disease in a way they were not able to do at present. In reply, Mr. Lloyd George said he agreed that the important thing was to encourage scientific investigation, so as to arrive at the best methods of That was provided for in his bill. cure. There would be set aside a special fund for the purposes of scientific research. The government would make use of and assist existing sanatoria, those which had been maintained by voluntary contributions, and even those which were built by private enterprise.

UNIVERSITY AND EDUCATIONAL NEWS

MR. MORTON P. PLANT has offered to give an endowment of \$1,000,000 for the woman's college which is to be established at New London, Conn. It is a condition that the name shall be changed to the Connecticut College for Women.

THE General Educational Board has made public a list of its latest appropriations for colleges and schools, amounting in all to \$634,000. All the gifts to colleges are conditional and are applied to endowment only. Other gifts may be applied to current expenses. The list follows:

Aj	ppropria-	
College	tion	To Be Raised
Converse, Spartansburg, S. C.	\$50,000	\$100,000
Drury, Springfield, Mo	75,000	325,000
Franklin, Franklin, Ind	75,000	325,000
Franklin and Marshall, Lan-		
caster, Pa	50,000	$225,\!000$
Huron, Huron, S. D	100,000	100,000
Pennsylvania, Gettysburg, Pa.	50,000	150,000
Totals	\$400,000	\$1,225,000

Appropriations aggregating \$68,000 went to the education of southern negroes, \$130,000 is set aside for demonstration work in agriculture, also in southern states, under the supervision of Bradford Knapp, and \$36,000 for professors of secondary education in state universities of the south.

BROWN UNIVERSITY receives a bequest of \$85,000 from Oliver Henry Arnold, M.D., of Providence.

THE Boston Edison Company will give the Massachusetts Institute of Technology \$3,000 for a period of years for the purpose of electrical research involving a thorough investigation of the use of electricity in vehicles employed in trucking or delivery.

WESLEYAN UNIVERSITY has purchased ground from the Russell estate as a site for a new observatory, which will be erected from the proceeds of a fund given in 1903 by Mr. Joseph Van Vleck. This gift has been increased by others, and now approaches \$60,-000.

SIR FELIX SEMON, M.D., has transferred to the University of London, for the foundation of a lectureship in laryngology, a sum of money amounting to £1,040 presented to him by the British laryngologists on his retirement from practise.

THE Connecticut Agricultural College will conduct from July 5 to 28 a summer school of nature study, agriculture and agricultural pedagogy, of which Professor A. F. Blakeslee is the director.

PROFESSOR GEORGE F. KAY, who has been for four years professor of petrology and economic geology in the University of Iowa, has been elected head of the department of geology to succeed Dr. Samuel Calvin, who died on April 17. Professor Kay has also been chosen by the Geological Board to succeed Professor Calvin as director of the State Geological Survey.

DR. CHARLES LINCOLN EDWARDS has been appointed assistant professor of biology and assistant director of the marine biological station in the University of Southern California.

LIEUT. COL. WIRT ROBINSON, Coast Artillery, has been nominated by the president to be professor of chemistry at West Point, to take effect on October 3, to succeed Col. Samuel E. Tillman, who has been the head of the department of chemistry, mineralogy and geology since December 21, 1880, and retires for age on October 2.

THE following changes take place in the department of philosophy in the University of Michigan: Professor Alfred H. Lloyd has leave of absence for the year 1911-12. During his absence Charles Milton Perry, Ph.D. (Mich.), joins the staff as instructor in philos-Dr. John F. Shepard, instructor in ophy. psychology, has been advanced to an assistant An additional instructorship professorship. in psychology has been created. It will be filled by Henry Foster Adams, Ph.D. (Chicago). Harry Wolven Crane, A.B. (Mich.), at present assistant in psychology, has been elected to the George S. Morris memorial fellowship for the year 1911-12.

THE following appointments have been made at McGill University: Dr. N. H. Alcock, to the chair of physiology; Associate Professor Ernest Brown, to be professor of applied mechanics and hydraulics; H. Barton, to be professor of animal husbandry at Macdonald College. The following promotions have been made in the faculty of applied science: Mr. Batho, assistant professor of mechanics; Mr. Graham, assistant professor of mineralogy; G. M. G. Johnston, assistant professor of chemistry; H. M. Lamb, assistant professor of civil engineering; S. W. Werner, lecturer in assaying.

DISCUSSION AND CORRESPONDENCE

ACADEMIC AND INDUSTRIAL EFFICIENCY

THERE is one way in which the efficiency of industrial concerns and of educational institutions can be compared effectively, viz., in the administration of the finances.

In the following paragraphs, a number of representative educational institutions are compared to the railways of the United States as to the ratio of compensation of labor to operating expenses.

According to "Railway Statistics of the U. S. of America for the year ending June 30, 1909," the ratio of compensation of labor to operating expenses is 62.06 per cent., which, if we except one year, is the highest ratio in eleven years past.

Moreover, we might state that the usual rule for industries in general is that about 65 per cent. of operating expenses goes to labor.

In the case of the railway statistics quoted above the salaries of administrative officers, "clerks" and "all other employees" are included, as shown on page 36, and as expressly stated to the writer of this article by the compiler of the statistics.

Thus in the following statistics on educational institutions, salaries of administrative officers and all other employees, are included along with the "productive" laborers, in this case, the teachers.

And, moreover, we must remember here that while a railway administrative officer is only an administrator and in no wise "productive," the administrative officer of the university or college is often, and indeed, in colleges prevalently, also a teacher and thus is "productive."

Moreover, the highest salaried officers in educational institutions are in all cases "productive'' whether they do actual class-room teaching or not. Presidents and deans in all colleges and universities are productive, in that they lecture a good deal, and hold numberless consultations with students which are as valuable, or more so, to the latter as are the consultations with the professors.

But the institution which pays the most to "productive" labor is the most efficient.

The following schools were selected simply because they are typical of certain kinds of schools and not because they show high efficiency in the matter under discussion. Indeed they are not higher than the average, as far as I know. Other institutions which were investigated, and which might be quoted, show practically the same ratio as those here quoted.

A number of schools showing a low ratio of

¹Slason Thompson, Bureau of Railway News and Statistics, Chicago, 1910.