compensation of labor to operating expenses might be quoted, but that does not necessarily say anything against the educational efficiency of those schools. The teaching staff may indeed be highly efficient. It simply indicates that too much is being paid for non-essentials as over against teaching, which latter we must consider the main business of the college.

Again it must be borne in mind that in every college in the land there is included in the operating expense a considerable per cent. of money which goes to fellowships, scholarships and other "charitable" purposes, as, for example: subsidizing boarding-clubs, college papers, etc. If this money were not thus devoted to "charity" it might be spent for additional productive labor.[2]

Thus the seven institutions quoted show a ratio of 66.5+ per cent. compensation of labor to operating expense while the railroads show a ratio of only 62.06 per cent.

	Year Ending	Paid to Labor	Operating Expenses	Per Cent.
Throop Polytechnic Institute	Sept. 14, 1909	$ 50,000.00	$ 66,150.16	75.6+
Princeton University	July 31, 1910	462,508.42	701,679.25	65.9+
Baker University	July 15, 1910	43,801.67	64,637.61	67.7+
University of Kansas	June 30, 1910	290,788.55	429,655.93	67.6+
University of Okla.	June 30, 1910	93,599.81	125,659.08	74.4+
Howard University (federal institution)	June 30, 1910	55,450.00	119,574.30	46.3+
Marietta College	May 31, 1910	27,405.45	40,375.67	68.1+
			Average	66.5+

Moreover, less of the labor paid out of college funds is non-productive than in the case of the railroads.

And, finally, operating expense in the case of colleges includes a considerable per cent. of moneys which are devoted to "charity" by which the public profits.

C. H. HANDSCHIN

[2] In the University of Chicago 7.6 per cent. of operating expenses goes to fellowships and scholarships alone. A majority of the larger institutions will show a similar per cent.

THE DIRECTOR VERSUS NEWTON

IN this case the following conversation reported by Professor Maclaurin in SCIENCE, XXXIII., 103, January, 1911, has just come to my notice:

Supt. Your theory of gravitation is hanging fire unduly. The director insists on a finished report, filed in his office by 9 A.M. Monday next; summarized on one page; type-written, and the main points underlined. Also a careful estimate of the cost of the research per student-hour.

Newton. But there is one difficulty that has been puzzling me for fourteen years, and I am not quite . . .

Supt. (with snap and vigor). Guess you had better overcome that difficulty by Monday morning or quit.

I have heard since that the conversation was continued as follows, and I wonder if the director was not right:

Newton. I shall continue to use my own judgment about the disposal of my time.

Supt. Yes, but no scientific man should go fourteen years, or even seven, without publishing results. Fourteen years ago you ranked among the leading thousand scientific men, but seven years ago your name was dropped, and this year it was not restored. A city that is set on a hill can not be hid.

Newton. Still I think I am right.

Supt. But the director thinks that, as long as you are accepting pay as a leading scientific man, you should *publish* enough results to keep up your reputation.

CHARLES ROBERTSON

CARLINVILLE, ILL.,
May 1, 1911

AN ENGLISH COURSE FOR ENGINEERING STUDENTS

TO THE EDITOR OF SCIENCE: I am not writing at present to discuss that much-discussed topic, the teaching of practical composition to engineering students, but to explain the first semester work in a course for freshman engineers given at the University of Minnesota, a two-hour course in English which goes hand in hand with a two-hour course in the more practical composition. Two authors are studied, Arnold and Huxley, the former in Gates's "Selections from Matthew Arnold," and the latter in Snell's "Autobiography and Selected Essays by Thomas Henry Huxley" in the Riverside Literature Series.