tion of the turbine which drives the dynamos, which generate the powerful electric currents, whereby the cars are propelled over the romantic electric road between Queenstown and Chippewa, on the Niagara river. The efficiency of these wheels seems to be very great. With a six-inch wheel, the smallest made, 1½ horse-power is obtained with a head of 10 feet of water, 13 horse-power with 40 feet of water, and 50½ horse-power with a head of 100 feet, which is about the maximum effective head available at Niagara. With a wheel of 66 inches diameter, the largest made, 1374 horse-power are obtained with a head of 40 feet of water. Wheels of this size at the Niagara Power Works are capable of doing the work of 5,000 horses, and, by transmitting the power by the electric current, may yet supply many of the cities and towns in New York State with all the power they want. The students of physical science and mechanical engineering cannot but feel greatly indebted to Messrs. Kennedy & Sons for their valuable gift.—D.H.M.

DONATIONS TO THE SCHOOL OF MINING.

We are continually receiving donations to the different departments of the work in the School of Mining. One of the finest collections sent in so far is the gift of Mr. B.T. A. Bell, of the *Canadian Mining Review*, Ottawa. It is distinctly a mining collection and represents nearly every branch of the science. Students of the iron industry will appreciate the collection of ores, fuels, and furnace products, representing the various ores, mixtures, and slags in the manufacture of pig iron, as practised by the New Glasgow Iron, Coal, and Railway Company at Ferona, N.S. The apatite regions of Canada are well represented by fine specimens, as are also most of the foreign localities which produce mineral fertilizers. To make this collection of artificial fertilizers complete, Mr. Bell has sent specimens of basic slag prepared from iron ores containing phosphorus, and which of late years has been used so extensively as to seriously affect the market for mineral phosphates. Specimens of mica, mineral paint, mountain cork, zircon and arsenical products, are worthy of special mention. The many fine specimens of gold quartz will fill vacancies in the collection for the illustration of ore deposits. Perhaps the most interesting part of this contribution is the asbestos exhibit. Not only have we specimens of Canadian and foreign asbestos and associated minerals, but we have also samples of most of the manufactured products. Steam packing, asbestos wicks and ropes are made from it. A fire-proof suit of clothes, made in Germany from Canadian asbestos, is complete, even to the extent of leggings and gloves. This is the only suit of its kind in Canada. A fine crystal of Canadian microcline rivalling the best specimens from Pike's Peak, a miniature oil well drilling derrick, several maps of Canadian mining regions, and a small library on mining subjects, are also among the contributions. Mr. Bell deserves our best thanks for this large collection of choice specimens.

SCHOOL OF MINING NOTES.

The "science specialist" short course has been completed and the "specialists" have gone so as to leave room for the "prospectors' class" at the beginning of the new year.

The final class in chemistry published its grievances in the columns of the JOURNAL and behold, they have been righted. Our mathematical tables have returned.

Theoretical versus Practical. "The doin' o' ae thing is better nor the un'erstan'in' o' twinty."

A student entered the laboratory at 8:05 A.M. the other morning, singing:

"Up in the morning's no for me,
Up in the morning early,
I'd rather gang supperless to my bed,
Than get up in the morning early."

And the rest of the class said——"Amen."

An invitation was received by the Science Hall students asking for the presence of a representative at the Medical Dinner. A meeting was called and Mr. Musgrave selected. The boys appreciate the good-will and fellow-feeling of their medical confreres.

Prof. (after his closing lecture in crystallography)—"I think you are now pretty well *grounded* in crystallography."

R. H-s-k.—"When he said *grounded* did he mean *stranded*."

A fine electric stereopticon for throwing views of mineral sections, etc., on a large screen for lecture purposes has arrived. It will be used for the first time at the mining opening early next term.

THE ANNUAL MEDICAL DINNER.

HOTEL FRONTENAC, DEC. 20TH.

Some time ago we predicted that the Medical dinner to be given by the Æsculapian Society of '94-'95, would surpass all previous efforts. It needs no demonstration other than the general expression of professors, guests, representatives and students to prove that this prediction has been fulfilled beyond all expectation.

President McEwen, his executive, and the different committees, are to be congratulated on a success almost perfect and which only medical perseverance and enthusiasm would dare to equal or excel.

The assembly was representative of every department of education, art, divinity, science, medicine, public institutions, and legislature. On the Presi-