



\*William F. Rigge, S. J., F. R. A. S., F. A. A. A. S.

The Woolworth Building, now nearing completion in New York City, is the highest building ever erected on earth. Its top is 785 feet above the sidewalk, and its foundation is 120 feet below it, so that its total height from foundation to summit is 905 feet. It contains 23,000 tons of structural steel, 17,000,000 bricks, and 1,800,000 square feet of floor tiles. Its weight is computed to be 125,000 tons, and its cost is \$12,000,000. The building covers a plot 155 by 200 feet and is U-shaped in plan. There are thirty stories in the main building, the roof of which stands 400 feet above the street. A central tower 85x86 feet contains an additional number of 25 stories above the roof.

The wind pressure in a storm is thirty pounds to the square foot, or 1,300 tons on the whole west face of the building. For this reason very special steel framing was introduced into its design.

Wood is entirely excluded and the structural steel is protected against fire by a coating of concrete or of terra cotta. There are four wide stairways and twenty-eight elevators. One safety feature of these elevators is of especial interest. As several of these have a vertical travel of 676 feet, Mr. Ellithorpe has designed an air cushion, that is, a smooth and closed air shaft 137 feet high to catch the dropping car. The air condensed by the falling car can escape with increasing difficulty, so that the car will be stopped gradually and without shock. Mr. Ellithorpe has personally dropped more than three hundred feet without injury, and the car has been so gently constrained and halted that water was not spilled from a brimming tumbler. As the total falling distance of 539 feet is four times the height

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of the confined air column of 137 feet, the weight of bodies in the car will be increased fourfold. At a previous test of this sort a man was seated in a chair. The chair was crushed and the man fatally injured by a splinter.

The International "Who's Who in Science" for 1913, has just come to hand. Besides the condensed biographies of the leading scientific men of all nations, there is a list of the world's universities and societies and of the men classified under their own specialities. Professor Rigge is the only representative of Creighton University, as well as of the Jesuit order in America. Only four other Jesuits are mentioned, Hagen of Rome, Sidgreaves of England, Fenyi of Austria and Algue of the Philippines. There are in all 7,317 names in the book.

The annual banquet of the National Geographic Society, held on January 11, 1913, at the New Willard Hotel, Washington, D. C., was marked by a feature unique in the history of the world. This was the presentation of the society's gold medal by the discoverer of the North Pole, Admiral Robert E. Peary, to the discoverer of the South Pole, Captain Ronald Amundsen. In his address Peary said amongst other things: "Ended is that splendid series of great ventures and voyages, beginning with the first pushing out of the Phoenician navigators through the Pillars of Hercules, into the frightful storms and fearful terrors of the great Atlantic, the crossing of the Equator, where the sun's furnace heat, it was thought, scorched men black; the rounding of the Cape of Good Hope; Columbus' splendid launching into the mysteries of the unknown West; the circumnavigation of the globe, the accomplishment of the Northeast and Northwest passages, the attainment of the North Pole and the South Pole.

"Ended is the long list of strange conceptions of the shape and character of this world of ours.

"Gone is the 'Open Polar Sea,' 'Symnes Hole,' the Garden of Eden; the glistening Lodestone Mountain; the huge ice-cap; the great crater-like basin.

"Conditions at the two poles are as unlike as the poles are far apart. The North Pole is situated at the center of the hemisphere of land, yet is itself, located in an ocean.

“The South Pole is situated at the center of the hemisphere of water, yet is itself located in a continent. The most northly North Polar land possesses a comparative abundance of animal life. On the Antarctic continent there is absolutely no form of animal or vegetable life.

“Human life is found within some 700 miles of the North Pole. The nearest human life is some 2,000 miles from the South Pole.

“Efforts to attain the North Pole have been going on for nearly 400 years. Efforts to reach the South Pole date back 140 years.

“The history of North Polar exploration is studded with crushed and foundering ships and the deaths of hundreds of brave men. The history of South Polar exploration shows the loss of but one ship and the loss of two or three men.”

In his reply Amundsen said that as a boy he had always followed Peary in his thoughts, and later in his work. While he was himself preparing a trip toward the North Pole, Peary's attainment of it turned his thoughts to the South Pole, which he succeeded in reaching on December 14, 1911.

On March 19th the official document arrived, which confirmed the announcement published in Science on January 10 that Professor Rigge had been raised from the rank of a member to that of a fellow in the American association. The text is as follows: “This is to certify that William Francis Rigge was elected a Fellow of the American Association for the Advancement of Science on the third day of January, 1913, and having complied with the requirements of the constitution is duly enrolled in the list of Fellows. L. O. Howard, Permanent Secretary.”