community involved, that physics is only one among several disciplines whose contributions to materials science will be made at this critical juncture in the nation's scientific and technological development.

RUSTUM ROY The Pennsylvania State University 11/83 University Park, Pennsylvania

The Materials Research Society is gratified by the generous notice we received in the editorial welcoming us and two other societies into AIP affiliation by Mildred Dresselhaus in the October issue. The governing Council of the Society evidenced our strong interest and confidence in AIP when it voted unanimously in favor of this affiliation. As Dresselhaus noted, the Materials Research Society is strongly interdisciplinary in its focus. Indeed, its sources lie in the feeling a decade ago among a small group of farsighted scientists that topical symposia were urgently needed to enhance the spread of knowledge beyond traditional disciplines and facilitate the development of technology. We welcome into our Society all scientists, engineers and technicians who carry out materials research. We cordially invite members of the physics community to join with us in the pursuit of interdisciplinary research and communication to topics of potential technological relevance. We are confident you will find our Society as exciting as Dresselhaus has.

THE EXECUTIVE COMMITTEE OF THE MATERIALS RESEARCH SOCIETY H. J. LEAMY, President C. W. WHITE, President-Elect E. N. KAUFMANN, Vice President R. L. SCHWOEBEL, Secretary K. C. TAYLOR, Treasurer 12/83 C. J. NORTHRUP, Past President

The truth about Rowland?

I enjoyed the article on physics and electrical engineering (October, page 48), especially the parts about Henry Rowland.

When I was a physics undergraduate in the 1930s, a professor told us the following story about Rowland and electrical engineering (it sounds apocryphal):

Rowland was retained by the company building the first big generating station at Niagara. The main question was, should it be ac or dc? Edison favored dc (wiseacres said because he did not understand ac), but Rowland recommended ac, which was adopted.

Rowland's consulting bill was high, and the company sued to have it reduced. On the witness stand, he was asked who was the world's greatest authority on the subject. Without hesitation he said, "I am."

His friends were horrified. Why, they asked, did he risk his case with such a bombastic statement? Rowland's answer was easy: "I had to; I was under oath."

Does anyone know whether there is any truth in this story?

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Homage to Thomson

I read Robert Rosenberg's article "American Physics and the Origins of Electrical Engineering" (October, page 48) with much interest, but I was disappointed to see no mention of an important figure of the late 19th century-Elihu Thomson. This remarkable scientist was largely self-taught, and after graduating from a normal school (Central High, in Philadelphia, the second-oldest high school in the US), was hired to teach physics there. He set up the first physics laboratories at that institution, and in his spare time began to apply electricity to practical problems. Eventually he left, and formed a company specializing in electrical technology. He had nearly as many patents as Edison, and it was from both his company and Edison's that General Electric was formed. His name lives on today in the Thomson Company, France's major electrical corporation.

Unlike Edison, Thomson did understand alternating current electricity. Indeed, it was his understanding of ac electricity which has most endeared him to me and to many other physicists. Every time I throw the switch for his famous "jumping ring" demonstration, and look on in amazement at this stunning manifestation of electromechanical interaction, I do him homage. For those readers who, like me, have their sense of wonder renewed whenever they perform (or see) this demonstration, let me note that there is a rather old biography on him, Elihu Thomson: Beloved Scientist, and for historians of science, let me suggest that Elihu Thomson is a somewhat neglected figure worthy of more study.

WAYNE M. SASLOW Texas A&M University College Station, Texas THE AUTHOR COMMENTS: I appreciate Wayne Saslow's feelings. Thomson was one of the great American electrical scientists of the late nineteenth and early twentieth centuries. Until his association with MIT in the 1910s, however, he had little direct impact on electrical engineering education except as a guest lecturer. It will be gratifying

to Saslow (and many others) to know that W. Bernard Carlson of Michigan Technological Institute is preparing a study on Thomson, and that Elihu Thomson is by no means unknown to historians of American science and technology.

In the rewriting of my article, an error crept into the second paragraph. The lights for the Brooklyn Bridge were arc lights supplied by the United States Lighting Company (Edward Weston's design). Edison's new incandescent lamps were indeed revolutionary, but cast less light than a modern 25-watt bulb, and bridge engineer Roebling felt they would not light up the bridge properly.

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Saturday-morning physics

The arguments (October, page 15) for and against the value of occasional lectures and visits to high schools and to smaller colleges, whether extracurricular or as guest lecturers in regular classes, omit what we believe to be an important benefit of such activities. It is the encouragement thereby given to the faculty of the institutions to continue their work under conditions of relative isolation from the larger scientific world and in the face of apathy and discouragements of many kinds.

ALBERT A. BARTLETT ROY H. GARSTANG University of Colorado Boulder, Colorado

11/83

Corrections

September, page 90-The citation by the President upon awarding Charles H. Townes the National Medal of Science should read:

"For fundamental contributions to the understanding of matter through its interaction with electromagnetic radiations and the application of this knowledge to the service of mankind, most notably in the invention of the maser and laser."

November, page 122-The letter "From Nuke to Anti-Nuke" was written by Thornton Page of the NASA Johnson Space Center, not Thomas Page.

January, page 25-The illustrations were reversed. The crystalline pattern is in the lower photo, and the sheared fluid is in the upper photo.