THE spring meeting of The American Society of Mechanical Engineers will be held in Chicago at the Congress Hotel, from May 23 to 26. Sessions are planned by the professional sections on aeronautics, fuels, management, material handling, machine shop, power, forest products and railroads.

THE *Journal* of the American Medical Association states that investigations made by the Rockefeller Foundation indicate that the countries of central Europe, with the possible exception of Austria, suffer from a shortage of physicians. Thus, in Poland less than 2,000 physicians are said to be available to care for the 25,000,000 inhabitants, and in Serbia it is stated there are less than 300 physicians outside of the army medical officers. In its efforts to rehabilitate the medical schools of central Europe, the Rockefeller Foundation has decided to aid in the establishment of a high grade medical school at Belgrade.

A SPECIAL committee from the Petrograd Academy of Science has proposed a plan to the academy, whereby a closer contact between the scientific men of Russia and Western Europe may be forwarded.

ON December 31 the Zoological Society at Hamburg decided to close the Zoological Gardens because the city can not afford to aid in maintenance.

MRS. EUGENE SILLIMAN BRISTOL has given $1,000 to the proposed Silliman fund, the income of which will be applied to the maintenance of the *American Journal of Science*.

UNIVERSITY AND EDUCATIONAL NEWS

DR. WALLACE W. ATWOOD, lately professor of physiography at Harvard University, was inaugurated as president of Clark University, on February 1.

DR. W. B. CANNON, professor of physiology, and Dr. Otto Folin, professor of biological chemistry, at Harvard University, were last autumn, offered research positions in the Mayo Clinic at Rochester, with all possible facilities for the conduct of research work and with salaries approximately twice those given by the university. They have, however, decided to remain at Harvard.

PROFESSOR F. C. NEWCOMBE, of the department of botany of Michigan University, has been granted leave for the second semester of the current year. His mail address will be Palo Alto, Calif. During Professor Newcombe's absence Professor H. H. Bartlett will be administrative head of the department.

DR. EARNEST ALBERT HOOTON has been appointed assistant professor of anthropology at the Harvard Medical School, and Dr. William Lorenzo Moss, assistant professor of preventive medicine and hygiene.

DR. G. W. A. LUCKEY, formerly dean of the school of education of the University of Nebraska, has been appointed specialist in foreign education in the U. S. Bureau of Education, Washington.

DISCUSSION AND CORRESPONDENCE

THRICE TOLD TALES

TO THE EDITOR OF SCIENCE: Referring to the letter of Professor Wood,[1] I, also, have a story about the Lick Observatory and to enable Professor Wood to have a whack at it I hasten to offer it to the public. In the summer of 1891 I was the guest of the then director of the observatory, Professor E. S. Holden, for a week or ten days while making a series of gravity measurements and I was greatly interested in the "public nights," in the establishment and maintenance of which the institution has done a most admirable piece of work.

On one of these occasions I was watching the long line of visitors formed near the big refractor, each awaiting his turn for a look through that wonderful instrument. The object to which it was directed at that time was a star cluster and, as every one knows, when a cluster is viewed through a telescope the number of stars seen is increased enormously and those visible to the naked eye are greatly en-

[1] SCIENCE, January 14, 1921.

hanced in brightness and although a glorious sight there is no showing of round disks like the sun, moon or the near planets when examined in the same way.

In some way my attention was drawn to a man somewhat back from the head of the line who seemed to be in a condition of tense excitement over the experience in store for him. He may have traveled hundreds of miles (as they do in California) for the opportunity of viewing the heavenly bodies with the aid of the enormous glass and, impatient with those ahead of him who lingered somewhat at the eye-end of the telescope, he seemed to fear lest the world should come to an end before his turn came. Having observed (I have no doubt a very common experience) that the first look through a large telescope or a microscope of very high power is generally a disappointment, I quietly "attached myself" to this man and was at his side when at last his chance came. He had been told the nature of the object and eagerly putting his eye to the eye piece he stood perfectly motionless for one long minute. Then, after glancing around to see if any of the members of the "staff" were near by, and assuming, doubtless, that I belonged to the "line," he held his open hand by his mouth to prevent the spread of his voice and hissed into my ear the words "*damned fraud.*"

I have told this story several times in the last quarter of a century, having thought it a rather good one and before Professor Wood despoils me of it by "running across it" in the Novum Organum, the Principia, the Dowager Duchess Cristina's account of her visit to Galileo's Observatory or some other old place, I hope he will remember that constructive criticism is the only thing that goes these days and that a good story should never be "scrapped" except for the purpose of making a better one.

T. C. Mendenhall

P. S. This letter might be indorsed, "Attention Mr. David Wilbur Horn," another iconoclast who on the same page shows a disposition to rob us of the charming picture of the young Galileo standing amidst his Aristotelian enemies at the foot of the tower of Pisa (though Professor Cajori has him at the top I insist that he must have been at the bottom in order to witness the effect of his experiment upon his opponents) calmly and confidently awaiting the arrival of the two balls simultaneously released at the top.

Have we not believed that imagination was a *sine qua non* in the equipment of a man of science? Even the swinging lamp in the Duomo has been robbed of its romance by the discovery that it was not in existence in Galileo's day. We may cling to the rope by which it is suspended, however, for, as far as I know, no one has yet proved that it is *not* the actual thing whose vibrations the young philosopher found to be isochronous.

And before it is too late I hope some enterprising company will "film Archimedes springing from his bath and running into the street, naked as a pair of his own compasses."

T C. M

To the Editor of Science: Apropos of thrice told tales, as illustrated by the communication of Mr. Wood in Science January 14, 1921, I may point out that the familiar story of Lincoln, in his young days, nailing a lie in court by showing the witness lied when he said he saw the deed done in the moonlight, because the moon was not at that date in the sky at night, is found practically the same, when ascribed to different occasions by

(1) Plutarch in the life of Alcibiades as to the desecration of the statues of Hermes.

(2) Chambers' "Book of Days," Lippincott ed., Vol. I., p. 14, in another court scene.

(3) "Lincoln, the Lawyer," by Frederick Trevor Hill, p. 230 seq.

The human mind runs easily and copiously in well-worn channels and one may easily construct plausible hypotheses, without introducing that of plagaiarism. I have recently seen the story of the lesson taught by the stars ascribed, I think, to still a fourth source, which I now forget. There are so few really good stories we might well allow them to travel as far and as long as they continue to instruct and amuse, without going too deeply into the question of the absolute varacity of

those who pass them along. A good story should never be spoiled by that.

JONATHAN WRIGHT

PLEASANTVILLE, NEW YORK,
January 18, 1921

REPLY TO PROFESSOR HORN

MANY times has the undersigned been found to be in error on historical questions. It is not easy to write during a period of over thirty years without occasionally committing mistakes. Even Newton once said, "It's impossible to print the book without faults." However, it is due to myself to state that not all the errors attributed to me are errors in reality. In not a few cases the critics themselves are in error. But never, before the appearance of Professor D. W. Horn's letter (SCIENCE, January 14, 1921), have I been accused of "Romancing in Science." Had Professor Horn been less excited and more contemplative, he would have written differently. My account of Galileo was prepared a quarter of a century ago. Were I to re-write it, I would make some slight changes. "Prior to Galileo it did not occur to any one actually to try the experiment" relating to acceleration. More recent research reveals that Galileo, like most great scientific men, had his forerunners. I say that Galileo publicly experimented "one morning." This may have been the correct time of day, but I am not now able to verify the statement. Galileo "allowed a one pound shot and a one hundred pound shot to fall together." From Galileo's "Dialogues Concerning two New Sciences" it appears that he did perform this experiment, but I am not sure that these were the particular weights used when experimenting before the university assembly. I have gone over sentence by sentence the passage quoted by Professor Horn and the above are the only changes which seem to me perhaps necessary. I repel as unjust the charge that I am "romancing in science."

Dr. Partridge rendered a service in calling attention to Galileo's experiments at the Tower of Pisa. However, I still think that the Doctor overstated his case, was wrong in implying that Galileo made only one experiment, and without sufficient reason called in question the accuracy of Viviani's "Life of Galileo"—a life which Favaro, after very many years devoted to the study of Galileo, has found to be remarkably reliable. Of course, part of the discussion hinges on the word "exactly." No description of an experiment can be exact in every detail. However, if essentials suffice, then our knowledge of Galileo's experiments on falling bodies is exact, for we know exactly the purpose of the experiments, as well as the mode of experimentation, namely, the dropping of different weights of a variety of materials—mention being made of some of the materials dropped.

Professor Horn quotes: *Fortis imaginatio generat causum.* I agree, but whose *casus* is it really?

FLORIAN CAJORI

UNIVERSITY OF CALIFORNIA

A CORRECTION

TO THE EDITOR OF SCIENCE: The times are actually worse than I realized when writing recently about "Romancing in Science." The opening quotation should have read "O tempora," instead of "O tempus." The peculiar appropriateness of this quotation is apparent, for the correction came to me (from New York) as part of an *anonymous* letter!

DAVID WILBUR HORN

BRYN MAWR, PENNSYLVANIA

MEMOIR OF G. K. GILBERT

THE undersigned is engaged in the preparation of a memoir of the late G. K. Gilbert, to be published by the National Academy of Sciences, and would be obliged if geologists and others who possess letters from him or who recall incidents that throw light upon his character would submit them for incorporation in the story of his life. His great contributions to geological science are published and fully accessible; but the smaller non-scientific matters which give the life of a man its finer savor can be learned only by personal communication from his friends. A good number of such communications have been already received; they are of so great