

with a commercial wood products utilization company.

DR. EDWARD A. SPITZKA assumed his new work in the neuro-psychiatric section, medical division, War Risk Insurance Bureau, Washington, D. C., on March 1.

DR. HORACE W. FRINK, assistant professor of neurology at the Cornell Medical College, has sailed to work in psycho-analysis with Professor Freud at Vienna.

PROFESSOR SELSKAR M. GUNN, formerly associate professor of public health at the Massachusetts Institute of Technology, who has served for three years as associate director of the Commission for the Prevention of Tuberculosis in France, has left for Prague, Czechoslovakia, where he is to act as adviser in Public Health to the Ministry of Public Health. This appointment is in connection with the program of cooperation between the International Health Board of the Rockefeller Foundation and the Ministry of Public Health.

A MEMORIAL lecture on the life and work of the late Sir William Abney will be delivered before the Royal Photographic Society of Great Britain by Mr. Chapman Jones.

As a tribute to the services and character of the late General William C. Gorgas, the Senate has ordered that the remarks made at the memorial services in his honor, held at Washington, D. C., January 16, be printed.

UNIVERSITY AND EDUCATIONAL NEWS

THE sum of \$1,000,000 has been given to the new School of Medicine and Dentistry of the University of Rochester, by Mrs. Gertrude Strong Achilles and Mrs. Helen Strong Carter, daughters of Henry A. Strong, who died in Rochester in 1919. The money will be used toward the erection of a clinical hospital as a memorial to the father and mother of the donors.

THE *Bulletin* of the American Mathematical Society announces that in the department of mathematics at the University of Illinois, As-

sociate Professor R. D. Carmichael has been promoted to a full professorship; Dr. C. F. Green, Dr. L. L. Steimley, and Dr. B. Margaret Turner have been appointed instructors; Professor E. R. Smith, on leave of absence from Pennsylvania State College, has been appointed associate.

DR. RHODA ERDMANN, formerly lecturer at Yale University, has been appointed lecturer on experimental cytology in the University of Berlin.

At the University of Cambridge Dr. W. L. H. Duckworth, Jesus College, has been appointed to the newly created readership of anatomy, Mr. F. A. Potts, Trinity Hall, demonstrator of comparative anatomy, V. C. Pennell, Pembroke College, an additional junior demonstrator in anatomy and Dr. C. S. Myers, Gonville and Caius College, has been appointed reader in experimental psychology.

DISCUSSION AND CORRESPONDENCE

HUMAN NATURE AS A REPEATING FACTOR: THAT THRICE TOLD TALE

THE following comments on Professor Wood's "Thrice Told Tale," *SCIENCE*, January 14, 1921, are based upon my long experience in showing celestial objects through a great telescope to tens of thousands of Saturday-night visitors, and in explaining photographs of star clusters, the Milky Way, spiral nebulae, etc., to thousands of others. Perhaps these comments will be of interest to the psychologists.

I fear that Professor Wood is unduly concerned about the victimization of present-day expositors of the universe, including himself. Contrary to his implication that the response to his (Wood's) explanation of the universe, made by the chance visitor to his ingenious telescope, could never be made again, I would say that the incident in all its essentials has certainly happened many times, and it will doubtless occur many times in the future, for human nature is a first-class repeating factor.

When visitors to an observatory get a sudden appreciation of the bigness of our sun and other stars, of the number of suns in our stellar system, of the possible number of

planets revolving around those suns, of the strong probability that intelligent life exists in abundance throughout the universe, of the number of the spiral nebulae, of the probable sizes and masses of the spirals, etc., they frequently react with the comment that, if what the astronomer says (of the universe) is true, it doesn't matter much whether we (the people of the nation or the peoples of the earth) do this or do that. Their "this" and their "that" are generally dictated by the subject which happens to be uppermost in the public mind at the time. If our country is thoroughly interested in the presidential campaign, as it certainly was in the struggle of June, 1912, what is more natural than that Professor Wood's lone visitor should not be the only person to illustrate his philosophy by turning to that absorbing question of the day? And so, following a sudden comprehension of the extent and contents of the universe, our Hercules cluster visitor reacted, "I think it doesn't matter very much whether Roosevelt or Taft is nominated at the Chicago convention;" and G. Lowes Dickinson's lone telegraph operator in a railroad shack in the Rockies reacted, "I guess it doesn't matter two cents after all who gets elected president."

Other visitorial reactions here have drawn upon other subjects occupying the public mind, but there is no call to describe them now.

I recently asked one of my colleagues who has dealt extensively with the visiting public in the past twenty-six years whether he has had any experience bearing on this subject. He replied: "I have on several occasions drawn visitors' responses paralleling the incident described in your address. I have observed this reaction, not only in connection with visitors to the observatory, but from members of audiences to which I have lectured. Last month I delivered a short lecture to the patients in the tubercular hospital at Livermore, California, on 'Life in other worlds,' making references to the great number of suns in our stellar system, the possible multitudes of planets revolving about those suns, and the probability that many of those planets are inhabited. At the close of the lecture one of the patients came

up to me and said, 'After listening to your lecture, I don't think it matters much whether we patients get well or not.'"

I am respecting the value of understatement in saying that the essential parts of Professor Wood's story have happened here many times in the past thirty-three years in connection with the more than 200,000 visitors whose ideas of the universe have been enlarged in an immense number of cases by looking through the telescopes or by listening to the interpretation of astronomical photographs. I hope it is also an understatement to say that my experience in dealing with the public along this interesting psychological line seems to have been somewhat more extensive than that of others who have written on the same subject.

May I turn from these natural happenings to an incident truly astonishing? In some well-known book I have read of a human being who, looking at the moon through a telescope, was told that the large ring-formation in view was the crater Copernicus (or possibly Tycho or Archimedes—I can not locate the passage now), and who said to his instructor, "I should like to know how astronomers discovered that the name of that crater is Copernicus." This imaginary event is widely known in astronomical circles, but no one, in my opinion, had thought that it actually happened or even could happen. Yet, one Saturday night in the nineties a visitor descending from the observing chair said to me in all seriousness and innocence, "I was able to follow your description of the moon's surface, but I should like to have you tell me how astronomers discovered that the name of that large crater is 'Copernicus.'" If this unnatural incident could repeat, why waste energy and ink over the hypothesis that Wood's neighbor, acting in accord with widely prevailing philosophy, was a genuine unique?

W. W. CAMPBELL

MOUNT HAMILTON, CALIFORNIA,
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GALILEO AND WOOD

TO THE EDITOR OF SCIENCE: I have long been interested in horns, and I should dearly