1894 and and only 2.53 in 1895. The decrease of the death-rate from diphtheria was almost uniform in every district of the Empire; the prevalence of the disease was, however, about the same as it had been for the last twenty years, and the *Lancet* holds that is unquestionable that the serum treatment has had the effect of producing a remarkable improvement.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. HENRY STAFFORD LITTLE, of Trenton, N. J., has given $100,000 to Princeton University to complete the quadrangle in the campus by the erection of a new dormitory.

MISS GOULD has given $20,000 to the endowment fund of Rutgers College.

RUSH MEDICAL COLLEGE, Chicago, has been freed of its debt of $71,000, and will now be affiliated with the University of Chicago, adding a faculty of seventy-seven members and seven hundred students.

THE Trustees of Cornell University have voted $45,000 for an addition to Morse Hall Chemical Laboratory of the University. The first floor of the new building will be devoted chiefly to inorganic chemistry, while the second floor will be for physical chemistry.

CHAIRS of physiology and and anthropology and anatomy will be established in the University of St. Andrew's, Scotland.

DR. KARL CHUN, professor of zoology at Breslau, has been called to Leipzig as successor to the late Professor Leuckart.

DR. G. BORN has been appointed full professor of anatomy in the University of Breslau; Dr. A. L. Bolk, professor of anatomy in the University of Amsterdam; Dr. P. Malerla, professor of physiological chemistry in the University at Naples; Dr. Gottloeb, professor of pharmacology in the University at Heidelberg, and Dr. Warburg, professor of botany in the University of Berlin.

THE following appointments for fellowships in the sciences have been made by the Board of Trustees in the University of Chicago: H. N. Stuart, Philosophy; M. L. Ashley, Philosophy; H. C. Biddle, Chemistry; A. W. Dunn, Anthropology; H. G. Gale, Physics; H. E. Goldberg, Chemistry; W. McCracken, Chemistry; M. D. Slimmer, Chemistry; Helen B. Thompson, Philosophy; C. E. Siebenthal, Geology; H. H. Newmann, Zoology; H. E. Davis, Zoology; W. N. Logan, Geology; H. Lloyd, Mathematics; Amy Hewes, Sociology; R. G. Kimble, Sociology; R. S. Lillie, Zoology; C. E. Rood, Astronomy; M. F. Guyer, Zoology; D. N. Lehmer, Mathematics; C. Ellwood, Sociology; J. W. Finch, Geology; I. Hardesty, Neurology. H. H. Bawden, Philosophy; Caroline L. Ransom, Archæology; F. L. Stevens, Botany; Elizabeth R. Laird, Physics; R. George, Geology; J. H. McDonald, Mathematics; W. R. Smith, Botany; Emily R. Gregory, Zoology; R. H. Hough, Physics; D. T. Wilson, Astronomy; S. F. Acree, Chemistry; F. Reichmann, Physics; F. E. Bolton, Pedagogy; E. H. Comstock, Mathematics; G. A. Sikes, Sociology.

DISCUSSION AND CORRESPONDENCE.

ASTRONOMICAL RESEARCH AND TEACHING.

TO THE EDITOR OF SCIENCE: It is a well known fact that many promising students, who have shown exceptional aptitude for original investigation during their university career, and, perhaps, have made important contributions to science in their published works, are never again heard from after obtaining college positions. In too many cases this is due to the fact that they are required to devote all their energies to the work of instruction, sometimes not in one subject only, but in several widely separated departments of study. The spirit of research, which may have been strong and vigorous when stimulated by the wholesome atmosphere of university life, rapidly fades away in such environment, and with it disappears all desire to make further contributions to knowledge.

As what has been said applies with special force to students of astronomy, it was felt by certain members of the Astronomical Conference, held at the Yerkes Observatory in October last, that a general expression of opinion on this important subject was desirable. It was seen, on the one hand, that the severe demands

of astronomical observation and investigation were sometimes not duly appreciated by the trustees and committees supervising educational institutions, and that thus the very purpose for which these observatories existed had, in a number of cases, been thwarted; and, on the other hand, that these observatories, failing to be actively administered, had ceased to be a force in teaching astronomical science.

These conditions were deemed important enough to require the serious attention of the Conference, but, unfortunately, by the time the subject had been sufficiently discussed the meetings were drawing to a close, and the following preamble and resolution, which one of the members expected to present to the Conference, could not formally be laid before it. In lieu thereof the signatures appended were obtained by the framer of the resolution in order that the professional opinion of active astronomers might still be recorded, and thus the managers of educational institutions having observatories might have a fair basis for remedying a very unfortunate condition.

The matter having been left in my hands, I have deemed it desirable to publish the preamble and resolution in SCIENCE, so as to meet the educational and scientific purposes for which they were drawn and signed by members of the Conference.

GEORGE E. HALE.

"Whereas, at a number of astronomical observatories connected with American institutions of learning the Director of the observatory is obliged, in addition to his work of observing by night and experimenting and making long and intricate computations by day, to devote an unreasonable amount of time to class-room teaching; and, whereas, this lack of consideration for the arduous work of the practical astronomer is alike detrimental to science and injurious to the highest grade of teaching properly associated with an observatory.

"Therefore, be it resolved by this conference of astronomers, that it is the unanimous and deliberate opinion of this body that the practical astronomer in charge of an observatory and carrying on both observatory work and teaching should not be required to teach classes oftener than five hours per week, and should besides be given the greatest freedom in arranging his entire scientific work associated with the observatory."

Approved by the undersigned.

Signed:

S. NEWCOMB,
Former Director of the Nautical Almanac Office, Washington, D. C.

EDWARD C. PICKERING,
Director of the Harvard College Observatory, Cambridge, Mass.

J. M. VANVLECK,
Professor of Mathematics and Astronomy, Wesleyan University, Middletown, Conn.

WM. HARKNESS.
Director of the United States Naval Observatory and Nautical Almanac, Washington, D. C.

GEORGE E. HALE,
Director of the Yerkes Observatory, University of Chicago, Williams Bay, Wis.

JAMES E. KEELER,
Director of the Allegheny Observatory, Allegheny, Pa.

M. B. SNYDER,
Director of the Philadelphia Observatory, Philadelphia, Pa.

H. S. PRITCHETT,
Superintendent of the United States Coast and Geodetic Survey, Washington, D. C.

H. C. LORD,
Director of the McMillin Observatory, Columbus, Ohio.

FRANK W. VERY,
Formerly of Allegheny Observatory, now of Providence, R. I.

MILTON UPDEGRAFF,
Director of the Law's Observatory, Columbia, Mo.

JOHN G. HAGEN, S. J.
Director of the Georgetown College Observatory, Washington, D. C.

CHARLES LANE POOR,
Associate Professor of Astronomy, Johns Hopkins University, Baltimore, Md.

A. S. FLINT,
Assistant Astronomer, Washburn Observatory, Madison, Wis.

Wm. R. Brooks,
Director of Smith Observatory, Geneva, N. Y.

E. E. Barnard,
Astronomer, Yerkes Observatory, Williams Bay, Wis.

G. W. Meyers,
Director of Observatory, University of Illinois, Urbana, Ill.

Henry M. Paul,
Astronomer, United States Naval Observatory, Washington, D. C.

Wm. W. Payne,
Director of Carleton College Observatory, Northfield, Minn.

J. K. Rees,
Director of Columbia College Observatory, New York City.

S. W. Burnham,
Astronomer, Yerkes Observatory, Williams Bay, Wis.

C. L. Doolittle,
Director of the Flower Observatory, University of Pennsylvania, Philadelphia.

F. L. O. Wadsworth,
Astrophysicist, Yerkes Observatory, Williams Bay, Wis.

David P. Todd,
Director of the Observatory, Amherst College.

MRS. PIPER, THE MEDIUM.

The last number of the *Proceedings of the Society for Psychical Research* contains a statement to the effect that the present writer does not pay 'the slightest attention to psychical research *à la* English Society;' he 'taboos it throughout, but has never even read the reports and their experiments in telepathy.' If this information were obtained by telepathy it does not increase my confidence in that method of communication. It is exactly the thirteen volumes issued by the Society for Psychical Research that seem to me to prove the trivial character of the evidence for the heterogeneous mass of material taken under the wing of the Society.

The present number of the *Proceedings* seems to me, however, of some interest in that it concludes or continues an account of the séances of Mrs. Piper, under the title, 'A Further Record of Observations of Certain Phenomena of Trance,' on which subject Dr. Richard Hodgson has now contributed over 600 pages. The case of Mrs. Piper is of interest, because Professor James has said:

"If you wish to upset the law that all crows are black, you musn't seek to show that no crows are; it is enough if you prove one single crow to be white. My own white crow is Mrs. Piper. In the trances of this medium, I cannot resist the conviction that knowledge appears which she has never gained by the ordinary waking use of her eyes and ears and wits." (Science, N. S., III., 884.)

It is Professor James who gives dignity and authority to psychical research in America, and if he has selected a crucial case it deserves consideration. The difficulty has been that proving innumerable mediums to be frauds does not disprove the possibility (though it greatly reduces the likelihood) of one medium being genuine. But here we have the 'white crow' selected by Professor James from all the piebald crows exhibited by the Society.

I find, among the great number of names and initials whose séances with Mrs. Piper are reported, five and only five well-known men of science. The following are the concluding sentences of their reports:

These elements of truth were, however, so buried in masses of incoherent matter and positive errors as to matters in which she tried to give information that the sense of her failure on the whole is far stronger with me.

Even as to the fact of her being in a trance at all my impression is not strong, despite the fact that I came fully expecting to be convinced on that point.

My state of mind, therefore, is almost the same that it was before the sitting, *i. e.*, a condition of willing approach to any evidence on either side of the question at issue; I am only disappointed that she did not give me more data for forming a positive opinion. I am fully aware, however, that one such sitting has very little negative weight, considering the variations which this sort of phenomena are subject to.

J. Mark Baldwin.

I was struck by a sort of insane cunning in the groping of the woman after something intangible.

It did not seem to me that she simulated a trance state. She was apparently, as far as I could judge, in some abnormal condition.