of the dashes and dots of the Morse alphabet, there are rising and falling strokes starting from a horizontal line. The receiver consists of a telephone fitted with a small concave mirror, upon which are reflected, in the form of streaks of light, the impulses marked on the membrane. By an ingenious arrangement, recalling in some respects that of the cinematograph, the streaks of light reflected upon the mirror are reproduced upon a roll of sensitized paper, thus giving a narrow oblong picture, which in the present stage of the invention is developed and fixed like any ordinary photograph.

WE learn from the Electrical World that a singular decision has been made in the Senate of the Supreme Court of the Empire of Germany. Last December three mechanics attached a wire to a cable laid in the house where they lodged, and stole electricity enough to light their rooms. The Provincial Court sentenced them each to one day's imprisonment. The decision was based on the principle that electricity possessed the essential properties of a movable object. It has gone from court to court, and now the Senate holds that the judgment of the Provincial Court must be quashed on the grounds that the law provides only against the theft of movable bodies, and the court holds that those properties are wanting in electricity which would be necessary to constitute it a movable object in the sense of the law. The sentence states that electricity must be regarded as one of the energies of nature, like sound, light and elasticity. It was also decided that damage to property cannot be pleaded, for that requires that the substance of the object must be affected. Again, it was held that property has been withdrawn from the wire, but the Senate denies this, for electricity is not one of the properties of copper wire, so it is unanimously concluded that the law as it is in Germany tapping an electric current is not theft.

## UNIVERSITY AND EDUCATIONAL NEWS.

Dr. Arthur Twining Hadley was duly inaugurated as president of Yale University on October 18th, in the presence of a distinguished audience, representing the chief universities of the United States. Dr. Hadley took the oath of office and made the inaugural address. Professor George P. Fisher, of the Divinity School, made the congratulatory address on behalf of the faculty.

COLONEL RUTHERFORD B. TROWBRIDGE has given \$10,000 to the Art School of Yale University.

Funds are being collected for a graduate fellowship at Mt. Holyoke College in memory of Elizabeth Miller Bardwell, formerly director of the astronomical observatory.

THE committee appointed by the National Educational Association to consider the plans for a National University at Washington will meet in that city on November 2d. The committee consists of President Wm. R. Harper, Chairman, President Alderman of the University of North Carolina, President Angell of the University of Michigan, Professor Butler of Columbia University, Dr. Canfield of Columbia University, Mr. J. L. M. Curry, Washington Agent of the Peabody and Slater Funds; Superintendent Dougherty of Peoria, President Draper of the University of Illinois, President Eliot of Harvard University, Professor James of the University of Chicago, Superintendent Maxwell of New York, Professor Moses of the University of California, President Schurman of Cornell University, President Wilson of Washington and Lee University, and Superintendent Soldan of St. Louis.

COMMERCIAL education was the subject for discussion at the sessions of the International Commercial Congress on October 28th. President Low, of Columbia University, presided. Addresses were also made by President Eliot, of Harvard University, President Schurman, of Cornell University and President Harrison, of the University of Pennsylvania.

A SPECIAL committee has presented a report to the general meeting of the Convocation of the University of London. The following are among its recommendations: (1) There should be only one faculty of science with adequate representation on the Senate and the Academic Council. (2) Engineering should be a distinct branch of the one faculty of science and not a

separate faculty, but degrees should be given in engineering bearing a distinctive name. (3) If it should be thought expedient to constitute a distinct branch of the faculty of science for any other scientific profession, there is not, in the opinion of my committee, any present occasion for giving a distinctive name to degrees to be taken in that branch. (4) If, contrary to the opinion of the committee, the subjects of the faculty of science should be divided by the commissioners, for electoral purposes, into several faculties, the committee hope they may be afforded an opportunity of giving further consideration to the principles upon which such division should be effected, especially in connection with the effect which the division would have upon the University examinations and degrees. (5) With regard to the position to be occupied by the art or profession of teaching, the committee think that this subject should find its place as a branch of the faculty of arts. (6) With regard to the proposal which has been made in more quarters than one to constitute a new and separate faculty for economic, commercial and social subjects, including, perhaps, administrative law, the majority of the committee think that this proposal is justified by the wide range and high importance of the subjects concerned, and the great and growing interest which they now attract. (7) With regard to the proportional representation of the faculties on the Senate and the Academic Council, the committee think that if the distribution of the faculties should accord with their suggestions the 16 representatives should be allocated as follows: To the faculty of science 5, arts 4, medicine 3, law 1, theology 1, music 1, economics 1-total 16.

According to *Nature* the work of the South African School of Mines, Kimberley, is now carried on in suitable premises, which were completed in the beginning of this year at a cost of about 9000l. Of this sum 2000l. was given by the Government of Cape Colony, 2000l. by the De Beers Company, and 5000l. was borrowed. The school has been established to carry out part of a scheme for the training of mining engineers in South Africa. The courses of instruction are intended to prepare students for a diploma of mining engineer, or for the

degrees of B.Sc. or M.Sc. in mining enginee: ing. Theoretical and practical instruction is given, under the direction of the principal, Mr. James G. Lawn, in mining, mechanical and electrical engineering, metallurgy, assaying, surveying and other subjects. Practical work is carried on in the mines and workshops of the De Beers Company, and also in various mines at Johannesburg. The time spent at Johannesburg is devoted to a special study of the cyanide process in all its developments, of the electrical machines and appliances at the mine where the student is working, of the methods of assaying and surveying, and of the economics of mining on the Rand. A thorough training for mining engineers is thus provided in connection with the school, the course of work described in the prospectus being of a very satisfactory character.

TEACHERS in Philadelphia public schools will hereafter be allowed to take their classes for a half day once or twice a year to the Zoological Gardens and Fairmount Park, the visit being regarded as part of the regular class duties. The managers of the Zoological Gardens have supplied a large number of tickets for this purpose.

Andrew Gray, M.A., LL.D., F.R.S., professor of physics in the University of North Wales since 1884, has been appointed professor of natural philosophy in Glasgow University, to succeed Lord Kelvin. Professor Gray graduated from the University of Glasgow and was afterwards assistant to Lord Kelvin.

J. S. E. TOWNSEND has been elected a fellow of Trinity College, Cambridge. He submitted papers on 'The Magnetization of Liquids' and 'Electricity in Gases and the Formation of Clouds in Charged Gases.'

Dr. W. E. Dixon, late Salter's Research Fellow in pharmacology at Cambridge University, has been appointed assistant to the Downing professor of medicine, and Dr. L. Humphry has been made assessor to the Regius professor of physics.

Dr. W. König of Frankfurt has been called to an associate professorship in the University of Greifswald. Professor G. Sclavunos has been made professor of anatomy and director of the Anatomical Institute at Athens.