which lie behind Beira, and which formerly teemed with game, will be denuded of all game through indiscriminate shooting. When the railway was commenced between Beira and Umtali buffalo existed in vast herds, and hartebeeste, wildebeeste, sable antelope, eland, and many other antelope existed in profusion. The railway is now completed and is simply a line running through the veldt, and would not of itself interfere with the game. At present there is but little game close to the line, but game of all sorts still exists in great but much diminished numbers some few miles away. The reasons for the disappearance of the game are as follows:—

1. The shooting of game for food by the *employés* of the line and the reprehensible practice of shooting for mere slaughter or for horns. In so far as shooting for the pot is concerned this is legitimate, as fresh meat cannot otherwise be obtained. Unfortunately the use of the .303 rifle is harmful, as animals are more frequently wounded by this rifle than killed, and go off into the veldt to die. Even with the soft-nosed or Jeffrey split bullet the shock is not severe enough to always bring the animal down and therefore this rifle compares unfavorably with the old Martini-Henry. The magazine .303 is simply a temptation to slaughter. During the past two years there have been a large number of *employés*, and the canteens have been pushed for food. It is the practice of canteen keepers at Bamboo Creek, which is in the center of the game district, to send not only white hunters but also natives to shoot; obviously the result is disastrous.

2. The advent of numerous hunting parties in the season, which extends from about June to December, during the early part of which many of the antelope are in young. These parties without exception go in for indiscriminate slaughter, and if allowed to continue will denude the whole country of game.

3. The rinderpest, which visited this country in 1898, killed off thousands of the buffalo, and nearly exterminated the eland and sable antelope.

The district in question is not cultivated and can only be of use as a hunting district. I have reason to believe that if properly approached, the Mozambique Company would be willing to establish a close season, or even close down the shooting for four or five years. There has now been established in Beira a cold storage company which will shortly commence operations, and thus every one on the line will obtain meat. Also after this year, the contract for the railway having been completed, there will be a far smaller population requiring meat.

Last year, owing to a very prolonged rainy season and the disturbed state of South Africa, there were very few hunting parties, and this year there will be practically none, owing to the war, so that the game have now a chance of increasing in number; but unless another five years of close time are allowed, followed by a rational system of close seasons, they will have but a small chance of getting up to the number they were at only three years ago. This applies especially to the buffalo, eland and sable antelope.

I would suggest that the hunting parties be strictly supervised and limited to a small number of heads; also that a long close season be established, and that buffalo, eland, and sable antelope be made Royal game for some years to come; also that natives be prevented from shooting.

I have reason to believe that the Mozambique Company would not object to employ gamekeepers, but there is no hope of the company ever doing anything on their own initiative.

This part is one of the few accessible spots where the larger kind of antelope can be found and it is more than a pity to see these beautiful animals slaughtered as they are now. In the interest of true sport the indiscriminate shooting of the past three years should be stopped. The months November and December should be the only months in which shooting is allowed. The grass having been burnt off there is less likelihood of wounding instead of killing, and by this time all the young have been dropped.

SCIENTIFIC NOTES AND NEWS.

We wish to call special attention to the letter from Dr. Richard Rathbun, on the International Catalogue of Scientific Literature published

above. It is absolutely necessary that forty-five sets be subscribed for in America, and it is desirable that this be done before the beginning of October.

THE judges who are to select 100 eminent Americans, whose names are to be engraved in the Hall of Fame of the New York University, are ready to receive nominations. The following men of science have been proposed: John Adams Audubon, Spencer F. Baird, Alexander D. Bache, Nathaniel Bowditch, William Chauvenet, Henry Draper, James P. Espy, Asa Gray, Robert Hare, Joseph Henry, Edward Hitchcock, Isaac Lea, Matthew Fontaine Maury, Marie Mitchell, Benjamin Peirce, David Rittenhouse, Benjamin Silliman, Benjamin Thompson, John Torrey. Are any of the readers of this JOURNAL prepared to suggest how many men of science should be included among the 100 most eminent Americans no longer living, and who they should be?

DR. CARL GEGENBAUR, professor of anatomy at the University of Heidelberg, has retired from the active duties of his professorship.

IT will be remembered that at the Twelfth International Medical Congress, held at Moscow in 1897, the city established a prize of $1000 to be conferred at each Congress on the one who since the preceding Congress had done the medical work of the greatest benefit to humanity. The first award of the prize was to M. Henri Dunant, founder of the Red Cross Society. At the present Congress, the award has been made to Professor Rámon y Cajal, for his researches on the minute structure of the nervous system.

THE Faculty of Science of the University of Rome proposes to publish by subscription a complete collection of the works of the late Professor Eugenio Beltrami. It will extend to three or four large volumes, and will be sent to those subscribing $10 or more towards the cost of publication.

THE Berlin Academy of Sciences has made further grants as follows: Dr. Holtermann, Berlin, for a botanical expedition to Ceylon, 4000 Marks; Professor Ludolf Krehl, Greifswald, for experiments on respiration, 1500 Marks; Professor Julius Tafel, Würzburg, for the continuation of his work on electrolysis, 100 Marks; Dr. Benno Wandolleck, Dresden; for the investigation of the morphology of diptera, 800 Marks.

PROFESSOR B. E. FERNOW, of the Cornell College of Forestry, has been appointed delegate to the International Forestry Congress of the Paris Exposition.

PROFESSOR FELIPE VALLE, of Mexico City, connected with the Tacubaya Observatory, is on his way to Europe, where he will represent the Mexican Government at certain of the congresses held during the Paris Exposition.

THE Royal College of Physicians has made the following appointments: Professor Clifford Allbutt, regius professor of physic at Cambridge, will deliver the Harveian oration on October 18th (St. Luke's Day); and Dr. A. E. Garrod, of St. Bartholomew's, the Bradshaw lecture in November. Dr. Henry Head has been appointed the Goulstonian, Dr. J. Frank Payne the Lumleian, and Dr. Halliburton the Croonian lecturer for 1901, and Dr. J. W. Washbourn the Croonian lecturer for 1902.

DR. ADALÁR RICHTER, professor of botany at the University at Klausenberg, has been made director of the Botanical Institute and of the Botanical Garden.

THE Moxon gold medal, of the Royal College of Physicians, founded in 1886 in memory of the late Dr. Walter Moxon, and awarded every third year for distinction in clinical medicine, was awarded to Sir William Tennant Gairdner, M.D., F.R.S., emeritus professor of medicine in the University of Glasgow.

DR. HERMANN A. LOOS died of yellow fever on the steamship *Chile* on July 17th, while on his way to South America. Dr. Loos received the degree of doctor of philosophy from Columbia University this year for work in chemistry and was offered the position of assistant in the University. He was only 24 years of age.

WE regret also to note the deaths of Dr. Johann Kjeldahl, director of the chemical laboratory at Karlsberg, and of Dr. Wilhelm Keck, professor of engineering at Hanover.

THE Comptroller of the City of New York has refused to pay most of the bills presented

by experts in the Mollineux trial. Some of the bills are as follows: Dr. R. A. Witthaus, chemist, $18,550; E. J. Lederle, chemist, $3800; E. S. Potter, a physician, $2450; Dr. Persifor Fraser, handwriting expert, $2181. There are some eight handwriting experts who present bills each larger than a thousand dollars.

THE annual meeting of the Corporation of the Marine Biological Laboratory was held at Woods Holl, on Tuesday, August 14th.

THE New York *Medical Record* contains a cabled report of the 13th International Medical Congress which met at Paris from the 2d to the 9th of August. M. Lannelongue, president of the Congress, made an opening address which was followed by speeches by the presidents of the National Committees, including Lord Lister, Professor von Bergmann, of Berlin, and Professor Kitasato, of Japan. General addresses before the Congress were made by Professor Virchow, of Berlin, Professor Burdon-Sanderson, of Oxford, and Professor A. Jacobi, of New York. The registration at the Congress numbered 6170 of which 412 were Americans.

WE have already called attention to the first International Congress of Physics which opened at Paris on August 6th. The Congress was divided into the seven following sections, which met in the rooms of the Société française de Physique: (1) general questions, instruction, measurements; (2) mechanical and molecular physics; (3) optics; (4) electricity and magnetism; (5) magneto-optics, radio-activity, discharges in gases; (6) cosmical physics; (7) biological physics. *Nature* states that among the subjects dealt with by British physicists are: the movements produced in an indefinite solid by the displacement of a material body, by Lord Kelvin; the constant of gravitation, by Mr. C. V. Boys; the propagation of electricity, by Professor Poynting; electric discharges in gases, by Professor J. J. Thomson; properties of alloys, by Sir W. C. Roberts-Austen; and the unit of heat, by Mr. E. H. Griffiths. In addition there are contributions by Professors Lorentz, van't Hoff, Warburg, Voigt, van der Waals, H. Poincaré, Cornu, Lippmann, Potier, Becquerel, Arrhenius, Exner, Spring, and others.

A TELEGRAM has been received at the Harvard College Observatory from Professor J. E. Keeler, at the Lick Observatory, stating that the following elements and ephemeris of comet 1900b were computed by Perrine from observations on July 25th, July 30th and Aug. 4th.

Time of passing perihelion	$= T =$ Aug. 3.21
Perihelion minus node	$= \omega =$ 12° 27′
Longitude of node	$= \Omega =$ 328° 1′
Inclination	$= i =$ 62° 31′
Perihelion distance	$= q =$ 1.0148.

Ephemeris.

1900.		1900.	
Aug. 10, R.A.	$3^h 15^m 16^s$	Decl.	+63° 41′ Light 0.83
" 14, "	3 34 44	"	+72 17
" 18, "	4 12 28	"	+79 11
" 22, "	5 46 24	"	+84 11 Light 0.43

THE U. S. council at St. Gall, Mr. Du Bois, sends to the Department of State the following account of the trial of the Zeppelin air ship: At the invitation of Count Zeppelin, I was present at the trial ascent of his air ship on the afternoon of July 2d at Manzell, on Lake Constance. At 7 o'clock the great ship, 407 feet long and thirty-nine feet in diameter, containing seventeen separate balloon compartments filled with hydrogen gas, was drawn out of the balloon house securely moored to the float. At the moment of the ascent the wind was blowing at a rate of about 26 feet per second, giving the operators a good opportunity of testing the ability of the air wheels to propel the great ship against the wind. The cigar-shaped structure ascended slowly and gracefully to about 30 feet above the raft. The balances were adjusted so as to give the ship an ascending direction. The propellers were set in motion, and the air ship, which has cost considerably over $200,000, started easily on its interesting trial trip. At first, the ship moved east against the wind for about two miles, gracefully turned at an elevation of about 400 feet, and, making a rapid sail to the westward for about five miles, reached an altitude of 1300 feet. It was then turned and headed once more east, and traveling about a mile against the wind blowing at the rate of twenty-six feet per second, suddenly stopped; floating slowly backwards three miles to the west, it sank into the lake, the gondolas resting safely upon the water. The time of the trip was about fifty minutes; distance traveled,

about ten miles; fastest time made, five miles in seventeen and one-half minutes; highest possible revolution of the propellers, 600 per minute. The cause of the sudden stoppage in the flight of the ship was proved to be a slight mishap to the steering apparatus, but the colossus floated gently with the wind until it settled upon the surface of the lake without taking any water. The raft was then brought up and the ship was easily placed upon it and brought back to the balloon house. The weight is 200 centners (22,000 pounds).

A CORRESPONDENT writes to the London *Times:* The International Congress of Hygiene and Demography is to meet this year in Paris from the 10th to the 17th of August, corresponding exactly in date with the meeting held nine years ago in London. Forming as it does one of a succession of congresses that are being held in Paris during the Exposition, it cannot perhaps be expected to arouse the same attention as the meeting in 1891, under the presidency of the Prince of Wales and the chairmanship of Sir Douglas Galton. During the nine years that have passed since the London meeting the science of hygiene has steadily developed, and the reports to be presented to the Paris meeting include questions that had hardly been formulated in 1891, and many that have claimed a great deal of attention in the past few years, such as bacteriology, prevention of tuberculosis, preservatives in food, and school hygiene. The program set out for the nine sections into which the work of the congress is divided covers a very wide field, showing how intimately hygiene enters into every branch of life. The several sections include —(1) bacteriology; (2) hygiene of alimentation, and chemical and veterinary science; (3) engineering and architecture; (4) personal hygiene and the hygiene of communities (schools, hospitals, prisons), cremation; (5) hygiene of professions and trades (unhealthy dwellings); (6) military, naval and colonial hygiene; (7) general and international hygiene, infectious diseases and sanitary legislation and administration; (8) hygiene of travelling and communications (railways, ships, public conveyances); and (9) demography. It is to be wished that there had also been a section for the discussions of poisons used in personal decoration and not only of those used for hair dyes, etc., but of the poisons used in boot polish, especially that for brown boots, by means of which feet have been seriously injured. In view of our recent and present experience of armies in the field, the section dealing with military hygiene should offer a good opportunity for the elucidation of various vexed questions in field organization and equipment. The late Sir Douglas Galton would have seized such an occasion for the deduction of practical results. His position on the Army Sanitary Committee of the War Office enabled him to effect many reforms, but he would have availed himself to the utmost of the opportunity which the Paris congress now offers to call attention to the many points in our South African experience which seem to demand further improvement. The Prince of Wales, in his admirable address at the opening of the congress in 1891, dwelt in forcible terms upon the lessons which might be learned in every life, private as well as public, from the study of the causes of the insidious progress of enteric fever, and it is especially interesting at the present moment to recur to those facts and to note with what acute perception His Royal Highness foresaw the perils of that illness which has assumed such formidable proportions, and which has caused such loss of life in our forces. It is a matter of great satisfaction that the president of the Hygiene Congress at Paris this year is M. Brouardel. No one will command greater confidence from his wide and scientific knowledge of hygiene. M. Brouardel was present at the congress of 1891 and he also attended the meeting of the British Association at Dover in 1899. He is therefore well known to the British public. Under the auspices of so able a president the Congress of Hygiene at Paris should maintain the high position in which it was placed by Sir Douglas Galton at the Congress of 1891.

UNIVERSITY AND EDUCATIONAL NEWS.

COLORADO COLLEGE has secured $100,000 for a new science building.

LORD BUTE has offered to give $20,000 to the