

of usefulness of the topographic maps. It was provided in the Sundry Civil Act, under authority of which the work will proceed, that levels be established above sea level in every area under survey and that these levels be marked on the ground by iron or stone posts or bench marks. Thus accurate levels will be run everywhere in the course of the surveys and monuments established at short intervals. The work done in this way will progress somewhat less rapidly than it has progressed under the old method. The \$25,000 which has been added to the appropriation is expected to meet the cost of doing the work in this way.

There are 30 or 35 triangulation and topographic parties in the field, or about 75 men, all told.

In New York the topographic surveys will be continued on the cooperative basis, the State government having appropriated \$15,000, the Federal Survey to allot a similar sum to the work. There will also be cooperation in Maryland.

The joint topographic and land subdivision survey of the Indian Territory, which has been going on without interruption in the field since May, 1895, will be continued to completion.

W. F. MORSELL.

*THE NEW YORK STATE VETERINARY COLLEGE.*

By the Legislative acts of 1894, 1895 and 1896 for the establishment and maintenance of a State Veterinary College, New York has taken a notable step in advance. The animal industry of the State is so important and extensive, and the relations of animal diseases so intimately interwoven with human health and well-being that every undertaking whereby the financial and sanitary interests of the State will have the benefit of the knowledge and continued investigations of a body of experts must command the approval of every one. It is believed, too, that the establishment of the

College upon the campus of a great university with the full advantages of its libraries and laboratories and surrounded by the university atmosphere will be of inestimable advantage to it. On the other hand, it will aid the university to have in its midst a group of investigators and students dealing with the great practical problems involved in the live stock interests of the State and the relations of this industry to public health. In a word, it is believed that the atmosphere of a university will inspire and liberalize the College, and the efforts of the College for the information and betterment of the condition of society will have a like beneficial effect on the university, by bringing clearly before it practical problems and the real efficiency of our present knowledge in dealing with great sanitary and financial interests.

The standard for the veterinarians of New York State is very high, and the State school ought naturally to prepare men well for their profession; it has therefore the duties of a professional school. On the other hand, its purpose being to study and if possible eradicate or show the means of avoiding animal diseases and epidemics, it must also be a center of investigation. For this double purpose of teaching and investigation, it has six special buildings in addition to those of the University; and it is believed that under the wise guidance of its Director, Dr. James Law, who has served the State and the Nation so well and efficiently in the past, that its opening in the coming autumn will mark another milestone of progress in the State. The following have been already appointed upon the staff of the College:

1. For director of the State Veterinary College and professor of veterinary medicine, principles and practice, zymotic diseases and State medicine: James Law, F. R. S. V. S. of Great Britain; professor of veterinary science in Cornell University;

formerly professor of materia medica and anatomy in the Edinburgh new Veterinary College and the Albert Veterinary College; chairman of the United States treasury cattle commission; State veterinarian of New York; consulting veterinarian to the New York State Agricultural Society; chief director of the United States Bureau of Animal Industry for the suppression of lung plague in the Mississippi valley and in New York; member of the tuberculosis commission of the State of New York; chairman of the regents' board of veterinary examiners for New York and author of a 'General and Descriptive Anatomy of the Domestic Animals,' the 'The Farmers' Veterinary Adviser' and numerous monographs on veterinary subjects.

2. For professor of veterinary surgery, obstetrics, zootechny and jurisprudence: (Appointment not yet made.)

3. For professor of veterinary and comparative pathology and bacteriology: Veranus Alva Moore, B.S., M.D.; chief of the pathological division of the United States bureau of Animal Industry, Washington, D. C., professor in the National Veterinary College and of histology in the medical department of the Columbian University, Washington, D. C.; author of numerous bulletins on the pathology and bacteriology of animal diseases, published by the Bureau of Animal Industry.

4. For assistant professor of veterinary and comparative physiology, materia medica and pharmacy: Pierre Augustine Fish, B.S., D.Sc., D.V.S.; assistant in the pathological division of the United States Bureau of Animal Industry, Washington, D. C.; formerly instructor in physiology and vertebrate zoology in Cornell University, and in zoology in the Marine Biological Laboratory at Wood's Holl; author of several papers on the structure and function of the nervous system and on pharmacological subjects.

5. For assistant professor of veterinary anatomy and anatomical methods: Grant Sherman Hopkins, B. S., D. Sc., instructor in comparative anatomy and embryology in Cornell University, author of monographs on topics in comparative anatomy and histology and on methods of anatomical and physiological demonstration.

6. For professor of microscopical technology, histology and embryology: Simon Henry Gage, B.S., professor of anatomy, histology and embryology in Cornell University; former chairman of the section of biology of the American Association for the Advancement of Science, and president of the American Microscopical Society; author of notes upon Histological Methods, the Microscope and Microscopical Methods; joint author of Anatomical Technology; contributor to Wood's Reference Handbook of the Medical Sciences, to Foster's Medical Dictionary and to various scientific periodicals and transactions.

7. For instructor in microscopy, histology and embryology: Benjamin Freeman Kingsbury, A. B., Ph. D., formerly graduate scholar and fellow in Cornell University; author of monographs on histology and upon the structure and morphology of the nervous system and organs of sense.

8. For assistant in veterinary bacteriology: Raymond Clinton Réed, Ph.D.

#### CURRENT NOTES ON PHYSIOGRAPHY.

##### RIVERS OF CENTRAL IOWA.

THE annual report of the Iowa Geological Survey for 1895 contains an essay by J. L. Tilton, of Indianola, on Warren county, in the south-central part of the State, in which particular attention is given to the origin of the river courses. The small ravines are post-glacial, consequent on the slope of the surface. The larger streams follow pre-glacial valleys, though they have not yet cut down to the bottom of the drift that clogged their former courses. It is believed