

the drainage area from which the river is fed. The nitrates are a little higher than is usual in May, but the free and albumenoid ammonias compare very well with the results obtained by the New Orleans City Sewerage and Water Board. The silt varies very largely from month to month, hence no reliable conclusion can be drawn from any one analysis. This silt was saved and will be subjected to a plant food analysis at a later date.

In conclusion, let me say that this analysis has, to my mind, demonstrated the desirability of a very complete and detailed chemical study, month by month, of the Mississippi River and its tributaries, and I should have undertaken such a study personally had I not learned that it was already planned for by Mr. M. O. Leighton, in charge of the Division of Hydro-economics, U. S. Geological Survey.

C. H. STONE.

U. S. GEOLOGICAL SURVEY,  
RECLAMATION SERVICE LABORATORY.

#### FUNCTIONS OF A TRANSPLANTED KIDNEY.

THE state of the circulation and of the secretion of a transplanted kidney has been observed on an animal operated on in this laboratory. A careful investigation of the literature has revealed no mention of a similar experiment having been performed hitherto.

The kidney of a small-sized dog was extirpated and transplanted into the neck. The renal artery was united to the carotid artery, the renal vein to the external jugular vein and the ureter to the œsophagus. Three days after the operation the neck and the abdomen were opened, in order to study the functions of the transplanted kidney and to compare them with the functions of the normal kidney. The transplanted kidney was found adherent to the muscles, and dissection was necessary to free it. In size it was larger than the normal kidney. Its hue was darker. To the touch the consistency of its tissue was normal, and the pulsations of its artery were as strong as the pulsations of the artery of the normal kidney.

Here is the summary of this observation: *the circulation in the transplanted kidney* was slightly greater than in the normal kidney,

as detected by the touch, copiousness of hemorrhage from incision in cortex, and pulse-tracings.

*The secretion of urine* by the transplanted kidney was about five times more rapid than by the normal one. The intravenous injection of sodium chloride solution caused no change in the rate of secretion in the normal, but markedly increased the rate of the secretion in the transplanted organ.

*The composition of urine* secreted by the transplanted kidney differed somewhat from that secreted by the normal one. The constituents were similar, but the chlorides appeared to be more abundant in the urine from the transplanted kidney, while the organic sulphates, pigments and urea were more abundant in the urine from the normal organ.

ALEXIS CARREL,  
C. C. GUTHRIE.

THE HULL PHYSIOLOGICAL LABORATORY,  
UNIVERSITY OF CHICAGO.

#### THE UNIVERSITY OF FLORIDA.

THE state legislature of Florida during its recent session, April 4 to June 2 of the present year, enacted a measure, commonly known as the 'Buckman Bill' designed by its originators to consolidate and strengthen, and to economize in the running expenses of the educational system of the state. By the provisions of the bill the entire system of higher education, consisting of a state university, a girls' college, and including the normal school for colored students and the institute for the deaf and blind, is under the management of a single board of control of five members appointed by the governor from five sections of the state. By the terms of the bill existing state schools are abolished as follows: The University of Florida, Lake City; Florida State College, Tallahassee; Normal School, DeFuniac Springs; East Florida Seminary, Gainesville; South Florida College, Bartow; Florida Agricultural Institute, Osceola County; and the Normal and Industrial department maintained by the state in the St. Petersburg Normal and Industrial School. To replace these abolished institutions there is created a University of the State of Florida

and a State College for Girls. It is required that the university be located at some central point in the state, both geographically and as to population, and with due consideration for the lands, grounds and buildings already in the possession of the state; and that the girls' college be located on the site of some one of the abolished institutions. The actual selecting of sites for these two institutions is left in the hands of the board of control in joint action with the state board of education. The organization and future management of the two institutions is left to the board of control, subject to the approval of the board of education.

Both institutions have been organized and it is announced that they will open to receive students on September 27. The girls' college has been located at Tallahassee, on the site of the former Florida State College. The city of Gainesville was selected by the boards in joint session as the permanent location of the university. It has been decided, however, that the new university shall continue on the site of the abolished university for one year, or until the grounds at Gainesville are ready for its reception.

The state university, as established, consists of: A department of agriculture, mechanical and industrial arts; a science and classical department; a normal department; and 'such other departments as may from time to time be determined upon and added at any joint meeting of the state board of education with the board of control.' The state experiment station retains its connection with the university.

The Buckman bill carries an appropriation of \$150,000 for the maintenance of the four institutions, under the management of the board of control for the ensuing two years. The city of Gainesville has donated a tract of five hundred acres of land as a site for the university and experiment station, and \$40,000 to be used in the erection of buildings, and has offered \$30,000 to the state for the buildings formerly occupied by the East Florida Seminary. The agricultural department and the experiment station receive the

benefit of the government funds accruing to them from the Morrill and Hatch acts.

Dr. Andrew Sledd, Randolph-Macon College, Harvard and Yale Universities, and president of the former University of Florida, has been secured as president. The heads of the science departments, all of whom occupied their respective positions in the abolished University of Florida, are as follows: Edward R. Flint, Massachusetts Agricultural College and Göttingen, chemistry; Karl Schmitt, Berlin and Marburg, mathematics; C. M. Connor, Michigan Agricultural College and University of Missouri, agriculture; F. M. Rolfs, Iowa State College and Colorado Agricultural College, botany and horticulture; M. T. Hochstrasser, Georgia School of Technology, mechanical engineering; J. R. Benton, Trinity College and Göttingen, physics and civil engineering; E. H. Sellards, University of Kansas and Yale University, zoology and geology.

---

#### STATIONS FOR THE DETERMINATION OF THE VARIATIONS OF LATITUDE.

SINCE the plan to make observations to determine the variations of latitude in the southern hemisphere in addition to those being made in the northern hemisphere was announced in *SCIENCE*, the Central Bureau of the International Geodetic Association has definitely selected the two stations to be occupied and the observations will begin on January 1, 1906.

One station is in South America, at Oncativo, a village in the Argentine Republic, on the Argentine Central Railway, 72 kilometers from Cordova and 622 kilometers from Buenos Ayres. It is located on a plain with favorable topographic and climatic conditions. The temperature ranges from  $-6^{\circ}$  to  $+40^{\circ}$  (Centigrade) and the mean cloudiness during the year is expressed by 4 on the customary scale. The rainy season occurs in summer, when the rainfall amounts to 700 mm. Dr. Luigi Carnera has been appointed observer.

The other station is in Australia, at Bayswater, a town 6 kilometers northeast of Perth, the capital of West Australia. There the annual range of temperature is between  $0^{\circ}$