

TESTING FOOD FOR CATTLE.

Elaborate Series of Experiments in Diet, Similar to Those Recently Made on Man, Being Made at the University of Pennsylvania.

Yale having conducted a series of food tests with "rookies" supplied by the United States army and by volunteers from the athletic department of the University, the State College of Pennsylvania, at Harrisburg, has begun a series of experiments of exactly the same nature with cattle.

The Pennsylvania experiments are all directed toward the scientific feeding of cattle, to find out exactly what foods are the best adapted to produce the best milk, the best flesh and the best butter.

It is not the plan of the Pennsylvania scientists who are conducting the tests to starve scientifically the cattle with which they are making their experiments, nor to try the effects of poisons on them.

On the contrary, the sole purpose of the tests is to find out what foods, or combinations of foods, will produce the richest results and the cost thereof. To make their tests correct they have invented what they call a respiration calorimeter.

It is an apparatus which measures with exactness the gases given off by a cow or an ox, and the heat generated in the animal's body during the process of assimilation.

The respiration calorimeter consists of a double walled chamber, about six by ten feet and eight feet high, containing a comfortable stall.

The walls of the chamber are double, the inner one being of sheet copper, while the outer one is of zinc, with an air space between. The door through which the animal enters, and the small opening through which food is given to the animal, close airtight, shutting off the interior from the world outside, except so far as it can be seen through a double plate glass window.

When an animal is placed in this hermetically sealed cell all air is cut off from it, save that which is supplied by a meter pump, which sends in a uniform quantity of dry, pure air at stated intervals.

The pump not only sends the air current in, but it draws a sample of it at stated intervals. Another pump draws the air off at the same speed that it is pumped in, and this exhaust pump draws samples for analysis at the same instant that the injector does.

By comparing these samples it is very easy to tell exactly what gases and how much the animal has added to the air and to determine the amount of gasses given off by different foods.

The copper inside box of this chamber is surrounded by two wooden boxes, each box being 8 inches larger than the one inside it. When in use they are kept at exactly the temperature of the air surrounding the stall, and thus there is no loss of heat from the chamber in which the animal is placed.

GREAT LOSS CAUSED BY BREAKING LEVEE.

Destruction of Farms in the Arkansas Valley--Growing Crops Swept Away.

Little Rock, Ark., June 11.—A special to the Gazette from Pine Bluff says: The flood in the Arkansas river today reached by far its most destructive stage in Jefferson county when part of the Frenchtown levee, about three miles below the city, broke and turned the river through a rich section of the country filled with growing crops of cotton and corn.

Since the water began to rise the planters in that section have been working day and night to save this important levee because it protects the rich bottom lands for miles below. Late Friday afternoon a telephone message was received in this city from those working to save the Frenchtown levee that if the water rose much higher the levee would break.

Many thousands of sacks of sand were sent down at once on a special freight and scores of men went down to assist in the work. The men worked all night long, but the rising water swept away their labors and about 3 o'clock the levee broke.

The rush of the water could be heard in this city. The breaking of this levee gives the water a clean sweep over the southern portion of the county through the townships of Vagine, Victoria and Richland, and the plantations in its wake are unprotected.

The farms of Dr. J. F. Simmons, J. W. Corcoran, Sebastian Geisler, Leo Andrews, James Gould and others were among those which suffered most.

The damage to these plantations cannot be estimated under hundreds of thousands of dollars as growing crops of cotton and corn were literally swept away.

At Fairfield, this county, the water stands from four to six feet deep on all the farms around the town. Among the list of sufferers in that neighborhood whose losses will be total are Ed. Manuel, Tom Brown and others.

FIGHT TO THE DEATH.

Killed His Father With Naked Fists--Nova Scotian Giants Locked Doors and Fought.

Halifax, N. S. June 12.—Word was received here today of a bare fist fight during the night at Glace Bay, C. E., in which a father was literally pounded to death by his son. The principals, "Bully" McRae and his son Jack are men of giant physique and known throughout the cape for their fighting abilities.

Both are over six feet in height and weigh 225 pounds. They met in a barroom and quarrelled over money matters. When interference was attempted the Scotchman drove the other occupants of the saloon from the place and, locking the doors, fought for an hour and until the elder McRae was dead.

The police finally effected an entrance to the barroom and placed Jack McRae under arrest.

The dead man's face had been battered to a jelly, his ribs broken and chest crushed in. The younger McRae was frightfully injured.

To Use Wireless Telegraphy.

Memphis, Tenn., June 12.—A local paper publishes an interview with one of the proprietors of a poolroom here, which has been closed, in which he says the place will be reopened Monday and that wireless telegraphy will be used to transmit the results.

Fought Over School Election.

Waco, Tex., June 11.—As a result of friction over the selection of a teacher for a public school at Elk, a small town ten miles north of Waco, a bloody street duel was fought here today by R. B. Torrence, his son, River Torrence, and J. McAden, a son-in-law, on one side and Dr. Holton, his son and Prof. G. W. Perkins on the other.

Bad feeling had existed for some time over the matter and firing began when the men met today. The elder Torrence was killed almost instantly, his body being riddled with bullets. Dr. Holton and his son received dangerous wounds and Prof. Perkins and Rivers Torrence were seriously injured. McAden escaped uninjured.

Shotguns and revolvers were the weapons used by the participants, all of whom are prominent.

Sing Sing, June 13.—Oscar Bergstrom, wife murderer, and Albert Koepping, sentenced for the murder of John Martine, of Port Jarvis, were electrocuted here this morning. Koepping stated that a woman committed the crime for love of him, but that he was willing to die.

It is reported in Pittsburg that Senator Quay, a day or two before his death, sent word to President Roosevelt, through ex-Senator Don Cameron that it was a great mistake to make Secretary Cortelyou national chairman. "The coming campaign," he is quoted as saying, "will be a hard one. Don—one of the hardest fights in the history of the Republican party. The opposition is strong and it may grow stronger, and on this account the new chairman should be a man who has had the greatest political experience that it is possible to obtain."

EXILED FROM COLORADO.

Deported Men Not Allowed to Enter Kansas--Abandoned Without Food or Water.

Denver, Col., June 11.—A special to The Post from Holly, Co., says: With a parting volley of rifle bullets fired over their heads by the militia and deputies to warn them to hurry eastward as fast as their legs could carry them and never again to set foot on Colorado soil, 91 union miners from the Cripple Creek district were unloaded from a special Santa Fe train on the prairie today, one-half mile from the Colorado-Kansas State line and left shift for themselves.

When the special train bearing the deported men was within half a mile of the Kansas line it was stopped by Sheriff Brady of Hamilton county and 40 deputies, who notified Lieut. Cole that under no circumstances would the train be allowed to cross the Kansas line and further that the deported men were not wanted in Kansas. Lieut. Cole assured the sheriff that the train would proceed no further. Then the order to quit the train was given in a hurry. Sheriff Brady called for the leaders of the unionists and notified them that they must not cross the Kansas line.

The exiles were disembarked in haste and without ceremony. "Hurry up there, you fellows," cried Lieut. Cole, when the train stopped in the midst of the alkali sand dunes that the prairie consists of near the Kansas line, "we haven't got any time to waste out here."

The special train had no sooner come to a standstill when the car doors were unlocked and thrown open and the order given by Lieut. Cole for the exiles to leave the train.

"Step lively, you fellows. Step lively," admonished Deputy Benton, who was in command of the civil force of the expedition, and in less time than it takes to tell it the three cars were emptied of their unfortunate and unwilling passengers and had started back to La Junta. The men were left on the prairie, without food or water, for the soldiers and deputies, in their haste to get home had forgotten to unload the stock of commissary supplies the train carried when it left Victor.

The exiles were a cheerless lot indeed. Without even a light and miles from the nearest habitation, they huddled together in groups on either side of the Santa Fe track and discussed their plight. Sheriff Jack Brady and his deputies were on hand to prevent the deported men from remaining in Kansas. Warned by the Kansas authorities that they would not be allowed to seek refuge in the State the spirit of the men broke. Many of them finally walked back on the railroad track to Holly, where they were furnished food by the big Salvation Army station there.

Cripple Creek, Col., June 11.—Gen. Sherman Bell made the following statement for publication: "I have indisputable evidence which will lead to the conviction of a number of union men for the murder of non-union miners who were killed in the Independence depot explosion. We have between 35 and 40 men in the bull pen who will swing for this crime. We are only waiting to capture two or three more men before we tell what our evidence is."

SCARBOROUGH WITHDRAWS.

Congressman Scarborough Announces His Retirement From the Race for Re-election.

Conway, June 13.—A sensation was created this evening when Congressman Scarborough authorized the announcement of his unqualified withdrawal of his candidacy to succeed himself in Congress. This news will be received throughout the district with surprise; in fact, it comes as a thunderclap from a clear sky to those who did not know of conditions and movements pending. There has been no doubt among his friends about his reelection, nor did Congressman Scarborough doubt it himself. However, he has watched with interest, growing greater day by day, the marvellous future of this region as it unfolded. He has slowly come to the conclusion that it is worth all of any man's time to devote it to the great trucking movement now in force. It is the best evidence yet furnished of what lies in this region that Congressman Scarborough was willing to give up his place in Congress to aid in pushing forward the immigration movement. He is on the spot and he knows. The opportunity is too great to permit of delay.

A Desperado at Bay.

Rome, Ga., June 12.—Jack Bone, the slayer of Z. T. Hall, has been located in the fastness of Rock Mountain, in the upper part of this county. He has provisions sufficient to last a week, and is heavily armed and has a big supply of ammunition. Bone is said to be a half-witted fellow and of a desperate character. He has sworn never to be taken alive, and those who know him believe that it is no idle boast. A posse with Winchester has surrounded the locality, and is prepared for a siege. Bone is so situated as to prevent a surprise, and he could do deadly execution if any attempt should be made to rush his position, as Rock Mountain is a remote and isolated spot. News from there travels slowly.

In England, where the judges wear wigs and robes, unconventional legal proceedings are not expected, but the papers tell of county court being held on a train. A case before Horatio Lloyd, a county judge, was unfinished, when he had to catch a train to Chester. It was decided to continue the case on the train. A first class carriage was secured, and although it was not reserved, the tribunal was not disturbed by any gossipy traveler dropping in to take part in the conversation. The distance to Chester was cut into two equal parts, and one barrister spoke the first seven miles, the other having the remaining seven.

The hammock season has arrived. A large stock to select from at Osteen's Book Store.

MYRTLE BEACH IS OPEN.

THE BUILDING ENTIRELY NEW.



Fittings new throughout. Finest Strand on the Atlantic Seaboard—Nearly Forty Miles Long and situated in the Curve of Long Bay.

The Management has spared no Expense to make Myrtle Beach Up-to-date and Thoroughly Attractive.

The Surf is admittedly the Finest yet Discovered on the Atlantic, and one of the few that has no Undertow.

Mosquitos and sandflies are unknown. The Hotel is situated on a hill and on the Mainland and is swept by breezes all Summer long.

Purest Artesian water from a well nearly 450 feet deep. The flow is strong enough to send water to the second story of the building.

Many amusements have been put in—such as Bowling Alley, Dance Pavilion, Pool Room, Reading Room.

The Bathing Houses are new and alright every way—large and airy. The Cuisine is remodelled and this department is under the immediate supervision of our Mr. Tennille, who has had years of experience in this line.

We furnish all the well known sea foods—Crab, Shrimp, Fish, Oysters, Turtle and Clams—in season.

Telegraph and Telephone Service from Hotel. Rates are Low and all Particulars May be Had of

FREEMAN & TENNILLE, Proprietors, Myrtle Beach, S. C.

MILLIONS ARE LOST BY PLANT DISEASES.

Revelations of Agricultural Department's Report for 1903.

Washington, June 12.—The destruction wrought on crops by countless plant enemies throughout the country is revealed by a report issued by the department of agriculture on "Plant Diseases in 1903."

It shows that the coffee leaf blight has accidentally been introduced into Puerto Rico and measures are being taken to stamp it out.

The tomato blight has practically ruined the tomato crop of Puerto Rico and potato rot has caused a loss of nearly the entire potato crop. The cotton rootrot in Texas prevailed to a greater extent than for many years, the loss being estimated at about \$2,000,000.

Anthracnose has been generally prevalent from North Carolina to Georgia and locally injurious, especially to sea island cotton in south Georgia. Wilt continues to spread slowly and now occurs in limited areas in North Carolina and South Carolina and is widely prevalent in South Georgia and southeastern Alabama, in connection with root rot. Rust occurred as usual on the poorer soils and was unusually severe in Texas.

The potato blight and rot caused widespread destruction, being especially enormous in New York, Pennsylvania, eastern Ohio, Michigan and Wisconsin.

The damage is estimated at \$10,000,000 for the season in New York alone. The black rot of grape was more general in Connecticut and Rhode Island, the loss being 40 per cent. The department is obtaining promising results in its efforts to discover a resistant vine. Die-back among the citrus fruit diseases in Florida is less destructive than before 1903. Rice blast occurred in the Cooper river section of South Carolina, where the crop was over 100,000 bushels short. The loss from the spread of this disease in the past six years is estimated at \$1,000,000.

Watermelon wilt is spreading in the south and cantaloupe leaf blight was injurious, especially in the south, the loss in Florida being 40 per cent. Tomato bacterial wilt was found in Connecticut and it was serious in New Jersey and Maryland and widespread in the south. The fusarium wilt in Florida caused a loss of \$500,000 and large areas of land also had to be thrown out of cultivation.

Cucumber downy mildew caused large losses in Florida and the trucking section near Charleston, where the estimated loss was \$100,000.

The bitter rot of apples has been widespread and included Virginia, the Carolinas and Georgia.

In the south pear blight is universal and little effort is made to control it. There was an epidemic of pear leaf blight that defoliated trees from Maryland southward.

Brown rot was very destructive to southern peaches, the loss amounting to from 35 to 60 per cent, of the crop in Georgia. Peach-leaf curl seems to cause immense losses each year in spite of the ease of controlling it by a

DAILY MARKET REPORT.

Special by Ware & Leland's Private Wire.

Table with columns: NEW YORK COTTON, Open, High, Low, Close. Rows for July, Aug, Sept, Oct, Dec, Jan.

CHICAGO MARKETS.

Opening. Closing.

Table with columns: WHEAT, CORN, OATS, PORK, LARD, RIBS. Rows for July, Sept, Dec.

Double Murder in Saluda.

Batesburg, June 13.—Another killing in Saluda county is to be reported. Last Saturday Nathan Truesdale and Richard Truesdale, both colored, were attacked by Russell McCormick, Leon Miller and Joe Miller, white. Richard Truesdale was shot and instantly killed by the Miller boys, while Nathan was painfully wounded on the wrist by a club in the hands of Russell McCormick. From what can be gathered there was no provocation on the part of the negroes for the attack on them by the white men. The killing took place on the Mount Willing road, in Saluda County.

Mexico City, June 12.—For several days subterranean noises have been heard at various points in the State of Jalisco. Sharp shocks of earthquake have been reported from Colima. No serious damage has thus far been reported. Slight earthquake shocks are also reported in the States of Guerrero and Chapas.

Clemson College Scholarships.

All applicants for these scholarships will apply to the County Superintendents of Education, who will give full information concerning the terms of the law and the conditions required for entrance to the College.

The examinations will be held early in July—before the County Boards of Education. P. H. Mell, President.

The News and Courier received this announcement yesterday with the following request from the President of Clemson College:

"I send you enclosed an item in reference to the Agricultural Scholarships established by the last Legislature for the benefit of poor boys who wish to get an education at Clemson College. Please insert this at once in the local column in the next edition of your paper and send the bill to this office if you are not willing to insert it as a free item."

We print the "item" in this conspicuous way without charge because it affords a proper subject for newspaper comment. There has recently been considerable discussion in some of the newspapers of the State about the method adopted by President Johnson in advertising the Winthrop Normal and Industrial College, and now comes this request from President Mell of Clemson College, an institution which has more money than all the other State colleges put together; so much money in fact that it has been necessary to establish special Agricultural scholarships to get rid of some of it.

Clemson College is fully able to pay for all the advertising it receives from the newspapers, and to pay the full card rates of the newspapers without any discount whatever, and this much it seems to us it ought to do in ordinary fairness, in view of the fact that no institution of learning ever established in South Carolina has received so much favor at the hands of the newspapers of the State. This service to Clemson College was most cheerfully performed by the newspapers because they felt it to be their duty to the public to aid in the development of this great institution of learning; but we submit that business is business and that there is no better reason why the newspapers should be requested to publish a straight advertisement as a "free item" than why Clemson College itself should be requested or expected to furnish board and tuition to any deserving young man who might present himself for matriculation whether he has complied with the rules of admission to the institution or not.—News and Courier.

Lawrenceville, Ga., June 13.—In a free fight at Brands Spring, near the Walton County line, in Gwinnett County, near Loganville, on Sunday morning, Bert Smith shot at his antagonist James Weathers, and, missing his aim, killed John L. Smith, a prominent citizen of Gwinnett County. Smith and Weathers fought with fist, both being knocked down twice, when Line Braswell came to the aid of Weathers. At this point Smith drew his pistol and shot, killing the by-stander, John L. Smith, his step-grandfather. Smith fled at once.