## In the Beginning Dr. Cary: On the Crest of Science, Resources

Both the Biennial Report of the Board of Trustees for 1890-91 and 1891-92 and the Catalogue of the State Agricultural and Mechanical College of Alabama for 1891-92 list "C.A. Cary, D.V.S., Lecturer on Veterinary Science" for January 2 through March 25 of 1892. On page 76 of the Catalogue under the heading "Veterinary Science," this:

"During the second term of this session, Dr. C.A. Cary delivered a course of lectures to the students in agriculture on Veterinary Science. To illustrate his instruction he used the mounted skeletons of the horse, ox, hog, and sheep, with which the Department of Agriculture is now provided."

Special lectures were delivered to the farmers every Saturday, and free clinics, for their benefit, conducted at the Station.

In the listing of Officers of the Agricultural Experiment Station under Board of Direction: "C.A. Cary, D.V.S.—Veterinarian."

In that same Biennial Report, this notation:

"At the last annual meeting of the Board in June, 1892 the Chair of Physiology and Veterinary Science was established and Dr. C.A. Cary, a graduate of the School of Veterinary Science in the Iowa Agricultural College, was elected to the position. Dr. Cary is now in Germany prosecuting special studies in bacteriology, and expects to enter upon his duties at the college next January, 1893."

The Chair of the Department of Agriculture and new Director of the Agricultural Experiment Station was Professor A.J. Bondurant, A.M. On page 56 of the Biennial Report, Professor Bondurant wrote:

## "Veterinary Department"

This new feature was introduced in connection with Station work during one term of the present session. Lectures were delivered to students of the third and second classes on veterinary surgery and animal physiology by Dr. C.A. Cary, and public clinics were held on the station grounds once every week, at which time the farmers from the adjoining county attended and brought with them stock to be examined and treated for any diseases or injuries.

There has been a partial equipment made for the Veterinary Department, consisting of a supply of medicines, surgical instruments, drawings and charts of different parts of the horse and ox, and skeletons of the ox, sheep, horse, and hog, all of which are in the agricultural laboratory.

Professor Bondurant was pressing for "better and larger farm buildings" including a "modern barn" and farm machinery with electric power.

What was impressive was the stewardship of meager and hard to acquire resources. Dr. Cary's own itemized account of his inventory, made by hand in beautiful penmanship on legal size ledger pages, identified all the supplies he would need or had already started to assemble.

The inventory of *materia medica* in the Experiment Station office included some 39 entries of inorganic chemicals and plant origin drugs of various properties. Comprising a partial list were analgesics (salicylic acid, cocaine), anesthetics (chloroform), antiseptics and disinfectants (alcohol, carbolic acid, iodine, periodide of mercury), autonomic stimulants (belladonna, digitalis, eserine, pilocarpine, ethyl nitrite), astringents (zinc sulphate, lead acetate, tannic acid), caustics (silver nitrate), blisters (cantharides), purgatives (Epsom salts, Glauber's salts, aloes, calomel, croton oil), stomachics/tonics (nux vomica), liniments, and demulcents (Vaseline, raw linseed oil). Again, this was a partial list. A veterinary pharmacy in those days was a compounding pharmacy.

Instruments kept in a box at the Agriculture Museum of the College included fourteen items for dental surgery and general bone surgery: molar cutters, extracting forceps, floats, chisels, gouges, trephine, mallet, costotome, a nose speculum, a mouth speculum, and bone drills. For castration and spays were a Schaefer ecraseur and a castrating knife; for dystocias, an embryotomy knife. For general surgery including feet and legs were hoof knives, tenotomy knife, scalpels and bistouries, scissors, artery forceps, needles and suture material, catheters, tracheotomy tube, aspirating needle and trocar, and rubber syringe. For thermo-cautery was a set of Paquelin's instruments with two platinum points—all in a special case ("valuable—\$30 cost"). And for recumbent restraint, the inevitable Baker's casting hobbles and chain.

For classroom teaching demonstrations were an artificial hoof, four charts of drawings of the teeth of horse and ox, chart drawings of the alimentary canal of the horse and ox, a large canvas chart drawing of the horse foot and horse shoes, five charts printed at the College museum, two diseased kidneys preserved in alcohol (at Prof. Atkinson's Laboratory), one human skeleton, one horse skeleton, one ox skeleton, one sheep skeleton, and one hog skeleton.

The surgical instruments are representative of those current with the last half of the 20th century. The *materia medica* are either inorganic or of plant derivatives, many still in use today. The student of medicine in the 21<sup>st</sup> century is to be understood if not forgiven for regarding the practice of the science over a century ago as being so outdated as to be irrelevant in this technologically advanced age. One would be well-advised to reflect on the fact that animals, especially the domesticated species on which man's very survival and the advance of civilization depended, have been the subject of intense study for over ten thousand years. What we have learned in the last century is a fraction of the accumulated wisdom of that time. Surgery and medicine of the domestic species, and in particular the horse, were highly advanced in Dr. Cary's day and he was truly on the cutting edge of his profession.

As later correspondence revealed, Cary was very much involved in bacteriology and pathology and would soon embark on serology and immunology, in keeping with all the discoveries rapidly being made on the heels of the work by Pasteur, Koch, Bang, and the many other

scientists in Europe—as well as that of Daniel E. Salmon, Theobald Smith, Frederick Kilborne, and Cooper Curtice in the United States, Duncan McEachran in Montreal, and John McFadyean in London. It was a seminal time in the Golden Age of Bacteriology, and Cary was on the crest of it.

That Dr. Cary commenced his lectures and clinical practice (free clinics) immediately after the New Year is further evidence of the extent of communications between him and President Broun during the previous year.

As to the remainder of that first year, there had been the previous agreement of Dr. Cary's study in Germany. This was not an unusual arrangement for it was almost a custom from the start that newly appointed professors at Auburn would be given leaves of absence to study at prestigious universities in the North or in Europe, whereupon their return, they could anticipate a professorial appointment at advanced rank and security. In June 1891, Dr. George Petrie had just completed his PhD at Johns Hopkins University and was made Chair of Latin and History. In this way, the Auburn faculty has always been seeded with terminal degrees from Cornell, Harvard, Yale, Princeton, the University of Chicago, Johns Hopkins, and so on.

On May 9, 1892, President Broun posted a handwritten note to Dr. Cary in Nauvoo, IL, Mrs. Cary's home, in reply to Dr. Cary's letter of May 5<sup>th</sup> to Dr. Broun, advising Dr. Cary that it was the president's intent to recommend to the Trustees Dr. Cary's appointment as chair of Veterinary Science and Physiology starting January 1<sup>st</sup>, 1893, at a salary of \$1,000. The Board meeting was on June 13-14, and he would inform Dr. Cary of the result.

"With congratulations and best wishes for your son I am very respectfully yours,
Wm. LeRoy Broun"
(The son was recently born.)

The subsequent publication, previously noted, of the Board's action at their June 1892 meeting confirmed the expected result.

Respectfully, Yr Humbl and obdt svt,

JTV