

Courses of Study

The Engineering Branches

When this college was founded, some thirty years ago, it was for the purpose of "instruction in agriculture and the mechanic arts, and the natural sciences connected therewith." This quotation, from the annual catalogue of the institution, shows the scope of work to be done by the school, as originally intended. The name, "Agricultural and Mechanical College," also shows that agriculture and mechanical engineering were supposed to be the main lines of work of the school. But the college outgrew these bounds, and within a comparatively short time, too. To the department of mechanical engineering were added in course of time: Civil engineering, electrical engineering, textile engineering, and architectural engineering. This addition of new departments was not by way of experiment—it was the supply of a demand, which, in some cases, had been there before it could be met.

As has been said, the department

goes well up into \$14,000, more is asked for, so that a shop for foundry work may be had. This may possibly be installed during the next year. It is also intended to arrange the course so that the student may receive a greater amount of laboratory and experimental work, so as to get better acquainted with the practical side of his profession.

The American is noted for his desire for rapid locomotion. Perhaps that accounts for the fact that over 40 per cent of the graduates of this school are prospective civil engineers; for most of the graduates of the civil engineering department take the course with the intention of entering railroad work. This course of civil engineering was introduced in 1887, five men graduating from the department in the following year. These five men have been the beginning of a long line of 234 graduates, who left their alma mater for the purpose of helping their State by work in the broad field that lies before the civil engineer. It is

ed the authorities in 1904 to add to this college the department of electrical engineering and textile engineering. In point of age, they may be called the babies of the college; but the electrical engineering department at least has already outgrown the swaddling clothes, for it boasts of a total number of 40 graduates, while the textile department has nine. There is no doubt, however, that both of the departments will make a grand success in course of time. The textile department especially offers unusual advantages, for it has a real fully-equipped cotton mill at its disposal. So the student may start in with a bale of cotton, trace it through all the various processes, and turn out the finished cloth. The value of this equipment, well over \$30,000, shows that the student taking advantage of the course will certainly not be hampered by an insufficient equipment. The electrical engineering department expects to get a new home in the near future. This building, together with new equipment, will necessitate an expenditure of about \$40,000.

We have at this school another instance of "the extremes meeting." This is furnished by the combination of the departments of drawing and of architectural engineering. The depart-

ment is well needed. The indications right at present are that the demand for artistically as well as practically trained builders is increasing. It is certain that this department of architectural engineering has a great and noble career before it. As to the department of drawing, we can say that it is working right along, hand in hand, with the various other engineering departments of our school. Modern engineering practice lays quite a stress on the draftsman; it even demands some ability for free-hand sketching of simpler devices, and all possible means are used here toward meeting that demand. With this idea of progress in mind, the drawing book, used by the Sophomore class, will probably be changed this year, so as to make it more practical and up to date. Quite a number of casts have recently been acquired, which will be of special benefit to the architectural engineer.

Agriculture at A. & M.

Agriculture, as taught at this college, is divided into three departments: Farm Husbandry, Animal Husbandry and Horticulture.

The farm husbandry department is headed by Professor Alvord, with



A Scene in the Pasture.

of mechanical engineering was the first in point of time. It graduated its first men in 1882, twelve young men starting out to help the world by working in the machine shops of our nation. This bunch of young men had the distinction of being the only graduates that year, the department of agriculture not graduating any men at that time. Since then a quarter of a century has passed, and 211 young men have received their diplomas from that department in the meantime. The course has been changed recently, with a view of bringing it fully up to the present requirements of the profession. Although the value of the equipment owned by the department

a fact that the department of civil engineering, although located only in a little corner of the Main Building, does actually turn out more graduates than any other department of the college.

Surveying grand old Texas from north to south, from east to west, that old saying, "Cotton is King," comes to our mind; but if we then examine the progress made in recent years, along the lines of what we might call general engineering, we are led to supplement our first statement by saying: "If Cotton is King, Electricity is Queen." It must have been a thought like that which prompt-

ment of drawing, as such, was created as far back as 1888. But in 1905 the department of architectural engineering was added to this college, and the two departments were united under one head as the department of architectural engineering and drawing. This department has as yet had only three graduates. But that is not surprising at all. In a relatively young State, as ours is, the producing people naturally lay more stress on the usefulness of things than on the beauty. And a trained mason or carpenter can build a house well enough, but to build the same house, and build it so as to satisfy the idea of beauty, the architectural engi-

Mr. Thomas and Mr. Puckett as assistants. This course comprises farm crops and management, with the different systems of drainage and irrigation. It is supplemented with a good course in dairying, of which Mr. Thomas is the head.

This department is just putting up a new building, in which there will be placed all the different implements used for improved farming. These implements are loaned to the college by the various large implement factories in the State. Such machines, as the large improved binders and harvesters, are set up and connected

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