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THE BOBBIN and BEAKER
Official Student Publication
Clemson Textile School

VOL. 9 SPRING ISSUE, 1951 NO. 2

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The Cover
The cover shows Miss Jeannine Holland, the National Maid of Cotton on her tour of the Textile School. With her is Bernie Graham, escort from the college at large.

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THE BOBBIN AND BEAKER is a non-profit magazine organized to serve Clemson students and the textile industry. The publishing and circulation costs are financed through proceeds received for advertisements and subscriptions. We ask our readers to consider favorably our advertisers when buying.
On Sunday, February 25, Miss Jeannine Holland, the 1951 Maid of Cotton arrived at the Greenville Airport to begin a long series of tours and personal appearances in and around Greenville, including a tour of the Clemson Textile School and campus. Elaborate welcoming services were held at the airport, and the Key to the City of Greenville was presented to Miss Holland.

The following day the Maid, along with her tour companions and the South Carolina Maid of Cotton, Miss Jean Neal, motored to Clemson to be viewed by 3,000 pairs of admiring eyes. Arriving on the campus about eleven o’clock in the morning, the two Maids were met on Bowman Field by an Honor Guard of Clemson Cadets and a welcoming committee composed of the school administration, including Colonel Cookson, Commandant, Dean Brown of the Textile School, and President R. F. Poole. Cadet Bernie Graham was selected as an aide to serve as Miss Holland’s escort during the day’s remaining activities on the Campus.

Immediately, Miss Holland and the touring group journeyed to the Textile Building where she and Miss Neal were welcomed by Professors Gaston Gage and Joseph Lindsay on behalf of the Textile School faculty; and Harry Batson, Henry Magill, and Walton Cassidy on behalf of the Textile students. Arm bouquets were presented to Miss Holland and Miss Neal by the student representatives.

A tour, conducted by Dean Brown, was then begun, and in the short time available all departments were hurriedly visited and points of interest were pointed out by the respective department heads. These professors really out-did themselves in showing off their various items and machines, but it is the opinion of the writer that Professor Allen, Head of the Knitting Department, won hands down. Mr. Allen was really turning out some production, and the ladies seemed fascinated by the whirling knitting machines. Perhaps Mr. Allen has something when he says, “Knitting is here to stay.”

The party then retired to the College mess hall where Miss Holland and Miss Neal turned their attention to food and the boys turned their attention to the girls. Miss Holland then made a brief talk thanking the students for the welcome given her at Clemson.

That afternoon the two Maids were carried on a brief tour of the campus, even being taken for a ride in one of the tanks belonging to the Military Science Department. All too soon, time allotted for the Clemson tour ran out, and the Maid of Cotton and her party journeyed back to Greenville to begin another round of festivities there.
The American System Of Worsted Spinning

By: G. Edwin Taylor, T.M. '52

BEFORE recorded history man learned that he could twist, or spin, a series of fibres into yarn. The instruments used for this process were the distaff and hand spindle. With refinements in skill, incredibly fine fabrics were produced by the use of yarns made with the distaff and spindle. Through the centuries all fibers were spun by this method; the spinning wheel of Elizabethan England was only a device to permit foot power to free the operative's hands for the spinning operation.

With the development of power machinery changes were made permitting machines to be devised to spin yarns of certain character and length of staple. This resulted in different machines for the processing of wool and cotton, and variations for other fibers; for example, silk was prepared by reeling, doubling and twisting the natural thread of the silkworm.

Cotton and wool were the principal fibers produced during the last century, and machinery development followed these two fields. Until the last few years the process for these two fibers became relatively stabilized. Most of the machinery for processing fibers was invented in England. The cotton system was brought to America by Samuel Slater, and in this country it developed into the high-speed, low-cost system of today.

Cotton processing fell into two general groups of carded and combed yarns, while wool processing followed similar groups of woolen and worsted yarns. Woolen yarns and fabrics have a general characteristic of roughness due to the fact that the fibers are not parallel, and many short fibers project from the yarn in every direction. Worsted yarns and fabrics have the fibers more nearly parallel and the shorter fibers removed, resulting in a smoother, more even yarn. To the average textile man the woolen yarns are carded quality, and the worsted yarns are combed quality. The combed quality yarns, in both the cotton and wool systems, are the most expensive.

The woolen and worsted systems, which were designed for machines with slower speeds and more doublings in the manufacturing process, are slower and more expensive than the cotton system. These two systems are the Bradford system, developed in the Bradford District of England and sometimes called the English system for this reason; and the French system, developed in France. Both systems were bodily moved to this country and have remained practically unchanged for almost a hundred years.

For years textile men have considered making worsted yarns on the cotton system, with its high production and low costs. Many experiments were made in this field, and very little success achieved. The chief reason being that cotton, with a fairly uniform staple length, required uniform settings; while wool, having a staple length from almost nothing to four or five inches, simply would not run on conventional cotton machinery.

Some mills, by trial and error, made fair progress in producing worsted yarns and fabrics. One of these mills, Slater Manufacturing Company of South Carolina, under the management of Wyllys H. Taylor, a 1905 Clemson graduate, made a considerable amount of worsted yarn from especially selected short top as early as 1934. This top was not stapled or cut to lengths, but run through drawing until a sliver of proper weight was obtained. Then it was processed as usual for cotton with all rolls set out as wide as possible. The yarn produced was not as even as regular worsted yarn and was used as filling in a cotton warp. This cloth was napped and used in light blankets. This system made creditable cloth and there were some advantages in it but not enough to create much enthusiasm.

With the introduction from Spain of Casablanca long draft spinning, a process which greatly helped control short staple, much progress was made by the few mills which experimented with the running of worsted yarns.

Newnan Cotton Mills of Newnan, Georgia, install (Continued on Page 22)
Dean Brown Attends European Textile Meeting

By Robert C. Bradley—TM-'51

DR. HUGH M. BROWN, Dean of the Clemson School of Textiles, left New York Friday for Europe where he will attend a series of textile and research meetings for the next six weeks.

The American Standards Association, as a member of the International Standards Organization, invited Dr. Brown along with 14 other delegates from the United States to make the trip. A highlight of the tour will be the ISO meetings in Bournemouth, England, June 4-9.

Dean Brown is representing the National Council of Textile Schools Deans, the American Society of Testing Materials Textile Committee D 13, and the Clemson College School of Textiles.

One of the important objects of the American Standards Association is to serve as the authoritative American channel for international cooperation in standardization work. The ISO is located in 29 countries.

Another objective of the group is to coordinate the different national standards to provide uniform international technical requirements.

While on the trip Dean Brown will be representing the same organizations at the International Research meetings in Lille, France, May 7-9 and at meetings of the Textile Institute of Great Britain, May 21-26.

Between meetings he will also attend the International Textile Exhibition in Lille, a project sponsored by the ECA, visit several textile organizations in Switzerland and other textile schools in England.

The Clemson Textile School has made great strides since Dr. Brown became its head. Many pieces of new machinery have been installed and the number of students have doubled.

DEAN H. M. BROWN
Of the Clemson Textile School.

Dr. Brown has had wide interest in the American Society of Testing Materials textile committee and other research organizations. He has conducted considerable research for various task groups and given several papers.

Mrs. Brown is accompanying the dean on the trip. They are expected to return to this country on the S. S. Liberte the second week in June.
Good Housekeeping Habits Pay Off In Textile Mills

G. W. Ballentine, T. M. '53

Some people scoff at the idea of good housekeeping in textile plants. They think that their time has been wasted if they take the trouble to keep the plant in a clean orderly condition. This is a big mistake on the part of the mill officials. There are several mills throughout the country today that are producing first quality cloth, but it is amazing that they can do it, when one considers the cleanliness of the machinery and the mill in general. This type of mill may be producing a first class fabric, but the health of its employees may become greatly impaired. Cases have been reported where skilled labor refused to work in a mill where filthy working conditions prevailed. This is detrimental to the company in many ways. The mill may lose skilled labor because of the sub-normal working conditions, and the workers who saw the bad working conditions of the mill may spread the word around. This may cause the mill to acquire a bad reputation and potential employees may become discouraged if they hear about it. The officials of an efficient textile plant should strive to keep their equipment and the mill in general as clean as possible, and the movement of the cotton through the various processes should be orderly.

Let's examine some of the other housekeeping problems that arise in the textile plant. In the picker room there are several difficulties that the overseer may encounter. Many mills have a surplus of picker laps that must be stored in order to conserve floor space. If a lap truck is available it is a good idea to place these laps on the truck. The lap truck may then be placed against the wall out of the way of the workers. These laps should be taken to the cards as soon as possible. With regard to the worker it is inadvisable to use a rack-type truck that carries six laps. The top lap that is placed on this type truck causes a strain on the worker and may result in a hernia. This type truck exposes the laps to human contact which results in excess waste. The width of the alley should also be considered. If you hang laps on a double truck it will take up approximately four feet of floor space. If the mill has narrow alleys it is a good idea to use the long truck in which the laps are placed vertically. The use of this type truck is advantageous because of the safety hazard and the waste problem. Many overseers have too many laps in the picker room, which results in the laps becoming torn on the ends and a loss of cotton due to waste. The production of the pickers should be regulated so that the card room can take care of all laps. This eliminates the necessity for storing the laps and the waste resulting from their storage.

Internal mill transportation doesn't receive as much attention as it should. Many mills have crude methods for moving cotton from one room to another. The card room presents a typical problem with relation to transportation. When the cans of sliver are moved, if there is no system for doing it, some of the sliver has to be taken out of the top of the cans. If this is not done, some of the sliver falls out of the top of the cans and into the path of the truck when it is moved. The result is wasted labor. If you cut the number of pounds per can it will also raise the cost. The answer to the problem is to have a truck with a rail high enough to hold the cans and have it finished with shellac so that it will not pick the sliver.

Many mills are confronted with the problem of how to handle the filling after it comes off the spinning frame. Overseers in various mills have solved the problem by having an area set aside for this purpose. The filling boxes should be placed in this area so that they will conserve floor space. If the boxes are stacked on top of each other four or five high the floor space can be properly utilized. If the mill has an excess of different types of filling, it may be beneficial to have a filling storage room. The room could be laid off in sections that would designate the filling type and blend. By having each (Continued on Page 29)
THOSE of us who have taken, or have yet to take, a course in the study of Cam Looms will be interested to learn that Mr. W. Bratton Williams has recently written a new laboratory manual as a guide in the study of the loom. This manual has been in use at Clemson Textile School for the past two semesters, and also in the N. C. State Textile School for the same period of time. In addition a number of Textile plants in this area use it in their training programs.

Mr. Williams, a native of Greenville, S. C., is a graduate of Clemson College Textile School in the class of 1925. While there he took an active part in sports, playing fullback on the football team in 1922, 1923 and 1924. In 1922 he was the winner of the R. W. Simpson medal, being the first freshman ever to win this award. Following his graduation, Mr. Williams taught high school mathematics and coached all athletics at Simpsonville, S. C. and at Blacksburg, S. C.

After this brief teaching experience, he started his textile career in the weave room of the American Spinning Co., in Greenville, S. C. He remained there for three years and then accepted a position teaching textiles at Calhoun Mills in Calhoun Falls, S. C. Mr. Williams was then the overseer of weaving at Calhoun Mill and later at Gossett Mill in Anderson, S. C. In 1939, he joined the textile faculty at Clemson College. To get his Masters Degree, he attended Penn. State College in the summer session of 1939 and 1940. He finished work on this degree and received it at Clemson in 1950.

The thesis that he submitted to secure the degree was the laboratory manual mentioned previously. This study guide on the cam loom mechanism required a year to complete. In the manual, the loom is broken up into twenty-eight exercises which cover two semesters work. Step-by-step instructions for removing parts of a particular motion, studying the parts while they are off the loom, and then replacing and resetting them on the loom are included. It is believed that this is the best method to employ in the study and understanding of the mechanical operation of the various parts. By this method, practically the entire loom is studied motion by motion, until gradually the student becomes familiar with the loom and acquires a fundamental knowledge of its mechanisms.
Highlights Of The German Textile Industry

By Claus Schulz-Nadler and George A. Mobley

Since the war, industry in the Western Zone of Germany has been reconstructed to almost the pre-war level. This has been made possible by American funds distributed through E.C.A., and the Marshall Plan.

A brief glance at a few statistics will show that the textile industry is near the top in the reconstruction program. Using the year 1938 as a basis of 100%, the output of German industry as a whole had reached 94% in 1950. This figure includes all branches of the textile industry. To quote a few absolute figures, textile exports in 1949 totaled $1,810,000,000, against $2,400,000,000 for 1936.

The textile industry in the Western section is concentrated in the states of Westphalia and the Rhineland in the northwest part of Germany, and in Bavaria and the Black Forest near the Swiss Boundary. The majority of the knitting industry in the Western zone is located in the Black Forest. After the war, the hosiery industry moved from the Eastern section to the West, where production was started with machinery chiefly imported from America.

The manufacturing processes in German Textile mills closely follow those used in the United States. In some of the larger plants, controlled draft drawing and long draft spinning eliminate two or three processes of roving. As in the United States, only one process of roving is used for coarser numbers of yarn, while two or more processes are used for fine numbers and combed yarns. One notable difference between American and German industry is that the Germans have few integrated companies. That is, the spinning mills are usually separated from the weaving companies.

Among the spinning frames used are those made by the Ingolstadt Company in Bavaria, and Rieter machines made in Switzerland, as well as English frames. The new Ingolstadt spinning frames are well built and are widely used in the reconstructed spinning mills. In recent years, the machine shops in the Russian Occupation Zone have moved to the West and are now putting their first western products on the market.

Mr. Schulz-Nadler is a native of the state of Westphalia, in northwestern Germany. He attended school in his home town, and served in the German army during the second world war. After the war, he attended the Technical College of Reutlingen, in Württemberg, where he majored in Textile Engineering.

Mr. Schulz-Nadler is now in the United States to study American methods of production and quality control. His first study was done in Texas, where he studied marketing practice and fiber testing. He is now at Clemson for the purpose of studying manufacturing processes and the methods of maintaining quality production by various methods of testing.

The Swiss frames are also very fine machines and are built with typical Swiss precision. They are fully automatic, insofar as a spinning frame can be automatic, and have gears and other moving parts enclosed as much as practical. Because of this precision workmanship and enclosing of parts, they run very quietly. However, maintenance presents a problem because of their intricacy. Many spinners producing combed yarns prefer the Rieter frames, but it is a common practice to send a fixer from the mill to the Rieter plant to study the machines before he takes over the maintenance of the frames in the mill.

The question of obtaining raw materials is a very important one to the German textile industry. In 1950, there were 5,217,991 spindles reconstructed and ready to run, but, due to the scarcity of raw stock, only 5,020,778 could be put into production. The waste obtained from the production of high quality wool, cotton and rayon goods is reprocessed, and spun into coarse yarns. This spinning is usually done on mule frames.

Since the war, German industry has realized the importance of fiber testing and production and quality control, so many mill managers have come to the United States to study the solutions obtained by American mills. Since German production is chiefly for export, quality is the main interest. They (Continued on Page 19)
Linthouse Personalities...

By A. H. Clarke '52

To most of you upperclassmen and alumni this article will hold no news, but for the benefit of many freshmen and some sophomores these few words will acquaint you with three familiar personalities frequently encountered about the Textile building. No doubt all of you have at some time seen these men working at one of the many jobs which they perform. Seeing these men on different jobs from day to day, you probably wonder just what they do and how long they have been associated with the textile organization here at Clemson. This writer hopes the following summaries will enlighten and familiarize you with these men.

MR. JOHN WILLIS

PAT WHITTLE

One of the most congenial and well liked personalities around the Textile building is “everyone’s friend”, Pat Whittle. To most of the old grads Pat is unfamiliar, having come to Clemson in September of 1936. Before bringing his services here, he was employed at Oconee Mills in Westminster where he held the position of second hand of the card room for eleven years.

While talking to Pat, I asked him just what his job was at the T-building. This gave him the open-

MR. "PAT" WHITTLE

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TEN
ing for which he had so eagerly awaited, so he came forth with the title, “Mechanic of the Yarn Manufacturing Department.” However, he was doing plumbing work in the basement at the time of this interview. He must have sensed that I was about to laugh at his big title so he retorted, “I’m really a fox hunter by trade.” Fox hunting is all right, Pat, but just be sure you don’t fall into any old wells.

During my three years stay here at Clemson, I’ve found that Pat hasn’t changed much except in one respect—he has a new set of ‘store-bought’ teeth. Just catch that big smile sometime and see for yourself.

JOHN D. WILLIS

Mr. Willis became affiliated with the Textile Department at Clemson August 1, 1928. Mr. Willis, known to the students as “Mr. John”, is the man you see setting the looms that are sometimes almost past running. He is connected with the Weaving Department and included in his “fixing”, besides the looms are the winders, slashers, and warpers. Not included in these little sidelines are his jobs in plumbing and steamfitting that are done in the lighthouse. From this assortment of tasks one can readily term “Mr. John” as a “jack of all trades”. This is precisely the term he used when interviewed with an added appendage—“jack of all trades and good at none”. However, we are inclined to disagree with the latter part of this statement. When a man can get a loom to run after some of these sophomore “loom-fixers” get through with it, he has to be good at something; either loom fixing or praying and perhaps both.

J. WHIT DILLARD

The Dillard brothers have seen many boys come and go at Clemson. One has been associated with the laundry for forty-six years and another teaching are welding during the same period.

The third brother is “Mr. Whit” who became connected with the Textile Department in December, 1903. At this time each building had a separate boiler room and ‘Mr. Whit” was in charge of the one in the present Physics building which was formerly the Textile building. When the machinery was moved to the present location, he aided in this operation.

Prior to being employed by the Textile Department, Mr. Dillard worked in the Veterinary Hospital here at Clemson for two years.

If any of you students want to know any facts pertaining to the early history of Clemson, just ask an old hand like “Mr. Whit”; he can tell it all.

Instructor Added To Textile Faculty

By Bernie Fleisher TM-51

The newest addition to the Textile School faculty, Mr. Thomas Efland, comes from Efland, N. C., a little town named for his grandfather. After graduating from Efland High School, Mr. Efland went to North Carolina State College to study textiles. His stay at State was interrupted by two and one-half years of service in the Army Airforce. During his time in service, he served as a Flight Engineer on B-29’s.

Upon receiving his discharge from the Army, Mr. Efland returned to N. C. State, where he graduated in June, 1949. From State, he went to the North Carolina Vocational Textile School as an instructor in Knitting. He remained there until he came to Clemson during the first part of this semester.

Mr. Efland is now teaching both elementary and advanced knitting courses—WD 309, WD 312 and WD 412. Mr. Efland is married and has two boys, Jimmie and Tommie. He lives in the Clemson Homes at Apartment 25-B.
Course In Throwing Added To Textile Curriculum

W. Clyde Hayes, TM-Aug. '51

THE course most recently added to the textile curriculum is Throwing, W.D. 404. Throwing, a term which originally came from the silk industry, means to twist yarn. When rayons first came on the market they were called artificial silk. Since these synthetics were processed on silk equipment, the filament rayon industry consequently fell heir to nomenclature applied to the silk industry.

In view of the fact that the synthetic industry is moving into the South in general and South Carolina in particular, there has been displayed a definite need for men who have a knowledge of the preparation and handling of filament synthetics prior to weaving. Furthermore, since the textile school was already equipped to slash synthetic warps and weave synthetic fabrics, this was the logical course to round out the curriculum and make available machines necessary for the twisting and doubling of yarns to form voile, crepe and combination yarns.

The course itself is set up to cover the preparation of suitable yarns for specified fabrics from the soaking process through warping, depending upon the requirements of the fabrics. Some of the fabrics for which the yarn preparations are covered are combination-yarn fabrics, flat crepes. French crepes, voiles, ninons, taffetas, triple sheers, satins, marquisettes, tricot and hosiery. Studying the preparation of yarns for a specific style of fabric, the student is given a list of the possible constructions and the yarns that may be used in that fabric. For example, under the heading of combination-yarn fabrics, the sley may vary from 36 to 72 ends per inch and the filling from 34 to 54 picks per inch. The yarns used will generally be from 75 to 150 denier crepe plied with an end of 100 to 150 denier acetate, these yarns being generally of 'S' twist and the same yarn being used in both the warp and filling of the fabric. One of the fabrics is then chosen for a detailed study and a style specification sheet prepared. The information generally found on the style specification sheet is of such a nature as to contain the types of yarns in both the warp and the filling, the width in the loom, the width off the loom, the number of ends and picks per inch, the yards per pound and other information that might pertain to this fabric. From this information a flow-chart is prepared which will designate the processes that will be used in the preparation of the yarn for the specific fabric. A detailed study is next made of each of the processes used, including

Yarn conditioning unit of the new throwing equipment.
soaking bath preparations, methods of tinting for identification, extracting, dyeing, twisting, twist setting, tensions, machine speeds, and the relative humidities at which each of the foregoing processes should take place.

The equipment of the chemistry department has been made available for the soaking and extracting of these yarns which are to be so processed. Machines available for use in this course are: a chest dryer, recently presented to the Textile School by Judson Mills; a 12 spindle high speed spooler, capable of handling bobbins, cakes, cones, pins or skeins and capable of producing packages up to one pound with production speeds from 200 to 750 yards per minute; a 16 spindle face drive twister which accurately builds up yarn into tapered or straight-end headless packages ranging from 8 to 32 ozs. using bobbins or perforated spools; a 40 spindle double deck twister for plying of combination yarns combining from two to twelve ends of yarn. These machines were donated by the U. S. Textile Machine Company of Scranton, Pennsylvania.

In addition to the foregoing machinery, the school purchased an “H-W” Conditioner for twist setting operations; one No. 350B Nylon Sizing machine for use in the single end sizing of nylon yarns for knitting, which winds the nylon on tubes for direct supply to the No. 50 pineapple coner. In addition, a No. 50 precision winding machine with the pineapple coning attachment is on order, this machine being capable of producing a package which is wound on a 4 30’’ paper cone and having a mechanism which shortens the traverse as the cone increases in diameter, the results being a cone with tapered ends; a Sipp-Eastwood Warper with a spool creel has been donated by Judson Mills for the warp preparation of crepe and combination-yarns for weaving.

While the number of students taking this course is limited, it is expected that next year both facilities and class time allotment will be expanded to such an extent that there will be sufficient room for all students desiring to take such a course. It is hoped that this course in Throwing will be of real benefit to the students, industry and the Textile School.
Where Are They Now . . . ?

Harry G. Batson '51

Spring again; then June and graduation. Once more, Clemson will be sending young men into the textile world, a world that holds unlimited possibilities for the trained, ambitious man. Many changes have been made in the past few years to make textiles one of the leading industries in the South, and this dream or goal of so many textile men. is within sight. Each year the industry is expanding more and more and doing their bit towards this progress are numerous Clemson men.

Former graduates? The industry is full of them and Clemson's Textile Department is justly proud of their work. Among former graduates at Tennessee Eastman Company in Kingsport, Tennessee, are: T. R. Bainbridge, Class of '39, Supervisor; J. E. Blessing, Class of '41, Mechanical Engineer; P. J. Burns, Class of '40, Textile Engineer; J. W. Dickert, Class of '35, Supervisor; C. F. Earnhardt, Class of '33 Supervisor; R. C. Forrester, Class of '40, Textile Engineer; W. W. Gignilliat, Class of '46, Chemical Engineer; W. L. Hicks, Class of '31, Chemist; E. E. Holt, Jr., Class of '48, Correspondent; J. J. Kirton, Class of '39, Supervisor; J. C. Owenby, Class of '48, Chemist; F. B. Pollard, Class of '32, Service Representative; H. W. Smith, Class of '37, Service Representative; D. R. Stokley, Class of '33, Chemical Engineer; G. W. Toncray, Class of '34, Foreman-Color Laboratory; A. L. Thompson, Class of '50, Physicist; Robert Hester, Class of '39, Chemical Engineer; T. W. Lewis, Jr., Class of '50, Chemist. At The Russeli Manufacturing Company in Alexandria City, Alabama, there is one former graduate. He is W. H. Crout, Class of '31, employed as Cloth Designer. Clemson men presently employed at Pelzer Mills in Pelzer, are: J. W. Blythe, Jr., Class of '50, Mechanical Draftsman Clerk; D. W. Quinn, Jr., Class of '47, Assistant Overseer Spinning; W. M. Simpson, Class of '37, Mechanical Superintendent; W. H. Taylor, Class of '26, General Superintendent. At Roanoke Mills in Roanoke Rapids, North Carolina, there is one Clemson man. He is E. H. Fuller, Class of '38, Assistant Superintendent. Presently employed at the Springs Cotton Mills in Kershaw, South Carolina, are: T. C. Hegler, Class of '42, Second Hand; Leo Fisher, Class of '49, Second Hand. In Pepperell, Alabama, employed at Pepperell Manufacturing Company, are two graduates: C. B. Ray, Head Chemist; C. A. Reese, Overseer of the Inspection and Packing Department. Presently employed at Abbeville Mills, Abbeville, South Carolina, are: R. H. Ashley, Class of '51, Finished Grader; F. D. Benson, Class of '39, Overseer Spinning, Winding, and Twisting; P. W. Bethea, Class of '38, Production man; J. A. Botts, Class of '42, Industrial Engineer; R. L. Calvert, Class of '48, Second Hand Top Dyeing; J. P. Carwile, Class of '49, Laboratory Teachiniian; E. L. Davis, Class of '49, Production Planner; G. R. Dusenbury, Jr., Class of '48, Overseer Cloth Preparation; R. C. Edwards, Class of '33, Treasurer; J. C. Fair, Class of '48, Production Clerk; T. D. Fergusson, Class of '40, Superintendent of Weaving; W. C. Gilmore, Jr., Class of '42, Designer; C. J. Glenn, Class of '43, Superintendent of Preparation; R. F. Hawthorne, Class of '49, Assistant Industrial Engineer; R. A. King, Class of '40, Overseer Finished Cloth; R. A. Link, Class of '42, Overseer Top Dyeing; G. M. Moisson, Jr., Class of '49, Chemist; R. E. Norwood, Class of '49, Production Planner; M. V. Poole, Class of '49, Second Hand Cloth Preparation; M. Y. Quarles, Jr., Class of '48, Second Hand Preparation; T. J. Reames, Class of '23, Personnel Manager; R. M. Rochester, Class of '49, Laboratory Technician; J. C. Simmons, Class of '46, Cost Accountant; H. E. Thompson, Class of '49, Production Clerk; G. D. Ware, Class of '50, Dyers Assistant; W. W. Webb, Class of '35, Overseer Dye House; Jerome Wilson, Class of '49, Second Hand Finishing. At Cannon Mills, Kannapolis, North Carolina, are: F. O. Griggs, Class of '36, Assistant Purchasing agent; George Griggs, Class of '50, and Malcolm Bishop, Class of '50, are working in the manufacturing part of the business; W. B. Thompson, Class of '33, Overseer of
Finishing; J. R. Wallace, Class of ’48, Civil Engineer; M. C. Propst, Jr., Class of ’40, Assistant Laboratory Director; E. S. Hunsuck, Jr., Class of ’48, Chemist; J. H. Cannon, Class of ’37, Personnel Director. At Avondale Mills, Sylacauga, Alabama, are: W. A. Turner, Vice President and General Superintendent; J. H. Pasley, Superintendent; J. E. Warren, Vice President and Purchasing Agent; W. J. McKemie, Supervisor of Cost Department; L. O. Todd, recalled to active duty with Army Air Force in July, 1950; H. M. Clark, Superintendent of Pell City Plant, Pell City, Alabama; W. D. Windsor, Utility.

H. Barrow Turner, Class of ’47, Superintendent of Magnolia Cotton Mills, Magnolia, Ark., was called to active duty from the Marine Reserve Officer’s Corps last July and after a few brief weeks of refresher courses was sent to Korea as a 1st Lieutenant in command of a Task Unit attached to the 7th Regiment of the 1st Marine Division. It is with the greatest regret that we report to you that on November 29, 1950, he was taken prisoner of War while serving with his unit on the Northern end of the Chongsin Reservoir Basin at the time the entire Marine 1st Division was encircled by the Chinese Reds. The only information received since his capture is that he was alive and un-injured at the time of his capture. Lt. Turner served in the Pacific during World War II and received both the Purple Heart and the Silver Star for gallantry in action.

Employed at Union-Buffalo Mills, Union, South Carolina, are: C. E. Carson, Class of ’50, serving in the Apprentice Training Program; H. H. Cosgrove, Jr., Class of ’39, Personnel Manager; G. S. Davis, Class of ’48, Foreman of Spinning; H. L. Dunlap, Class of ’49, Machinist; R. Y. Hamrick, Class of ’50, Head Loom Fixer; J. E. Smith, Class of ’50, Foreman in Cloth Room; W. E. McSwain, Class of ’49, Foreman of Spinning; H. W. West, Class of ’50, Trainee. Presently employed at Chicopee Manufacturing Corporation, Chicopee, Georgia, is J. T. Wiginston, Jr., Class of ’48, recently transferred from Standards Department to the Mechanical Department as a trainee under the Plant Engineer. Frank Haddon was transferred to the Cornelia, Georgia, Lumite plant last year. Walter Crenshaw was transferred to the Athens, Georgia, plant early this year. Both had worked at Chicopee. Orr Cotton Mills, Anderson, South Carolina, presently has four Clemson graduates. They are: J. J. Lyons, Class of ’25, Executive Vice President and General Manager; G. C. Jolly, Class of ’40, Card Room Overseer; G. A. Glenn, Class of ’48, Personnel and Engineering Director; R. W. Roberts, Class of ’50, Trainee. Working for American Enka Corporation, Enka, North Carolina, are: E. M. Salley, Jr., Class of ’27, Plant Manager; Lawrence Hart, Class of ’31, Research Textile Engineer; J. E. Spearman, Class of ’48, Research Textile Engineer; R. M. Stribling, Class of ’29, Dye Technician; C. C. Robinson, Jr., Class of ’49, Technician Supervisor; W. W. Abbott, Class of ’42, Manager Textile Laboratory, Lowland Plant. Employed at Darlington Manufacturing Company, Darlington, South Carolina, is T. M. Champion, Class of ’39, Industrial Engineer. Among the Clemson graduates at McCormick Spinning Mill, McCormick, South Carolina, are: B. C. McWhite, Class of ’47, Office Manager; F. P. Deason, Class of ’51, Trainee. At Johnston Mill, Johnston, South Carolina, are: H. S. Ackis, Class of ’41, Second Hand in Weave Room; W. B. Sawyer, Class of ’51, Production Clerk.

In the Burlington Mills chain we find many Clemson graduates. Among them: Ernest Abernathy, doing experimental work in Burlington, North Carolina; Howard Arnold, Weave Room Supervisor at Johnson City, Tenn.; Ruskin Arnold, Superintendent at Radford, Virginia; Jim Austell, Weave Room Supervisor at Altavista, Virginia; Alex Ball, Superintendent at Swan Ribbon Plant in Catawauqua, Pennsylvania; W. H. Ballard, Superintendent at Altavista, Virginia; W. F. Barnes, Assistant Superintendent in Bristol, Tennessee; Roy Bobo, Assistant Superintendent in Lexington, North Carolina; Robert Bonds, Supervisor of Weaving in Cordova, North Carolina; Harry Cannon, Assistant Superintendent at Vinton, Virginia; C. E. Crutchfield, Division Manager at Greensboro, North Carolina; Robert Duckworth, Supervisor of Spinning at Johnson City, Tennessee; E. W. Dunham, Overseer at Royal Swan Plant, Hatasauqua, Pennsylvania; J. L. Eskridge, Devel. Coord. in Greensboro, North Carolina; Fred Finley, Superintendent at Burlington, North Carolina; John Gaddy, Apprentice in Weave Room at Cordova, North Carolina; Noel Garvin, Weave Room Supervisor at Franklin, North Carolina; J. E. Garvin, Division Manager, Filament Division at Greensboro, North Carolina; Tom Graham, Supervisor of Weaving at Radford Virginia; Riggs Goodman, Weave Room Supervisor at Cordova, North Carolina; M. L. Hanna, Superintendent at Mooresville, North Carolina; Harold Hatfield, Shift Dyer at Greensboro, North Carolina; David Kennemur, Superintendent of Finishing at Cramer, North Carolina; Wesley Lee, M & S Supervisor at Burlington, North Carolina; Bill Little, Preparatory Overseer at Burlington, North Carolina; O. K. McCartney, Assistant Superintendent at Burlington, North Carolina; Joseph McMahon, General

(Continued on Page 25)
How To Write A Letter Of Application

George A. Mobley, TE-'52

At some time during his active working career, almost everyone has to write a letter of application. The man who can write this type of letter without a great struggle is rare. Usually, the writer does not know what to say, and when he figures that out, he doesn’t know how to say it.

Any executive will say that the successful letter of application has no set form. However, there are several points to remember. First, type the letter, or have it typewritten. As in schoolwork, typing pays off in the end. If you have to write, though, use dark ink on plain paper. Make your letter neat and readable.

Second, find out whom you want to receive your letter. You are trying to make a hit with some one person in the firm, and you will make much better progress if you address him by name. It shows that you are really interested, and that you have gone to some effort.

A third point is to use good English. Don’t be stiff or too formal, but don’t lapse into incorrect grammar and colloquisms. Avoid pedantry. Just because you have been to college and know some big words, don’t try to use them where simpler words suit much better. Be brief and to the point, yet explain yourself fully. That is hard to do, but it can be done.

The fourth, and by far the hardest, point to make is saying the right thing. Do not beg for a job. Make it seem to be to the advantage of the company to put you to work, but be subtle about it. Remember, you are selling yourself and your services. State your capabilities, but do not brag about them. Express willingness to work for a trial period to find out if you and the company are compatible. Make yourself available for an interview at the convenience of your prospective employer. If you have a preference as to time, don’t be afraid to say so, but don’t limit it to your own convenience.

Lastly, you should give your previous experience, scholastic background, and any other information which you think might interest your reader. A college diploma isn’t an infallible document which will make it possible to get any job you may apply for, but it will probably be a big help.

Now, after having read this article, calmly throw it in the waste basket, and forget it. You probably already have a good job, and I am still writing letters of application.

How to DESIZE with complete SAFE-T

Exsize-T is harmless to the sheerest and most delicate fabrics. Not a chemical—
but a liquid enzyme concentrate with a neutral pH.

Now used by many of the largest textile mills, Exsize-T is efficient, economical and safe! Write for free booklet.

SIXTEEN
Warp Ends

Dear Ruth:
I just read in the paper that students who don't smoke make much higher grades than those who do. This is something for you to think about.

Love,
Father.

Dear Father:
I have thought about it. But truthfully I would rather make a B and have the enjoyment of smoking; in fact I would rather smoke and drink and have a C. Further more, I would rather smoke, drink, neck, and make a D.

Love,
Ruth.

Dear Ruth:
I'll break your neck if you flunk anything.

Love,
Father.

BOBBIN AND BEAKER

"Bruno! Bruno!"
"Yes, Ma!"
"How many times must I tell you that a cuspidor is to spit in?"

"QUIPS FROM LINTHEAD LIPS"

"So as I say, for various and sundry reasons . . ."
"Atomic" Wray

"As I said before, . . . What did I say before?"
"Young John" Edwards

"A Junior and you don't know that?—boy, you've missed half of your education!"
"Uncle Bud" Cartee

"That's right—huh!"
"Doc" McKenna

"It's not the big things, but a multitude of the little-bitty-little ole things."
"High-pockets" Gage

"If you drop your pencil in this course, you will be two weeks behind. Next page!"
"Speedball" Campbell

"Boy-ys. I sure have got troubles."
"Crowfoot" Tarrant
VATROLITE®  
For brighter vat dyed colors on cotton, linen and rayon. Use this powerful concentrated reducing agent for faster, cleaner results on wool, cotton and rayon.

PAROLITE®  
A dust-free, white crystalline reducing agent. Soluble, colorless, excellent for stripping wool rags, shaddy, acetate or Nylon fabric.

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Concentrated high temperature desizing enzyme. Removes both starch and gelatine. Suitable for continuous pad-steam method. Remarkable stability at very high temperatures.

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Very efficient detergent with high wetting power. Effective in neutral, acid or alkaline bath. Dyeing assistant having good dispersing and leveling properties.

VELVORAY®  
A blend of vegetable oils and specially selected fats for a superior, non-foaming, finishing oil. High in combined SO₃ and stability. Excellent for sanforizing.

DRYTEX®  
A high-test wax emulsion type water repellent finish having extreme stability both in the barrel and in diluted form as used. Non-foaming.

DISPERALL  
Effective retardant for dyeing vat colors. Dispersing and leveling qualities, useful in wool and acetate dyeing. Valuable auxiliary in stripping vat colors, naphthols.

NEOWET  
Permits effective wetting at all temperatures—particularly useful with enzymatic desizing agents. Not affected by either acid or alkali chemicals.

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CARLTON HILL, NEW JERSEY
cannot compete with the American mills in quantity produced, so they have to strive for highest quality. As mentioned before, spinning and weaving are usually performed by separate companies with only the largest concerns having both. Many of the new mills being built are constructed along the lines of newer American mill buildings, with no windows, fluorescent lighting, and complete air conditioning. Practically all the older mills have been converted to fluorescent lighting.

As in America, the current trend is toward individual drive for textile machinery. All mills in Germany use electricity as a main source of power. In the mountain sections where water power is plentiful, the mills generate their own power, and in the Ruhrgebiet, near the coal fields, mills have their own steam-driven generating plants. However, most mills buy some part of their power from commercial power companies.

In Germany, as elsewhere in the world, the cost of living has risen in recent years. Again taking the year 1938 as 100%, in 1949, the cost of living was 167.2 per cent, and in 1950 it was 154 per cent. The wage scale in the textile industry is slightly different for men and women. The average wage of a woman textile worker was 92.9 D-Pfennig per hour in 1950, while men averaged 119.3 D-Pfennig an hour. It is easy to compare these figures with American money, since 100 D-Pfennig make 1 Mark, and a dollar is worth approximately 4.2 Marks. Therefore, a woman makes about 22.1 cents an hour and a man makes about 28.4 cents. These figures seem low compared with American wages, but they are in line with the wages in Germany as a whole.

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Textile Club Activities

By George A. Mobley TE-'52

After the initiation held April 14, Iota chapter has a membership of thirty-eight men. Fourteen new members were initiated, including 11 Seniors, 2 Juniors, and 1 Sophomore. The new members are W. D. Asnip, A. A. Bissell, R. E. Bowen, R. P. Boyd, R. A. Bridges, H. L. Brockman, J. L. Childress, F. C. Hoffman, G. W. Jones, J. M. Niver, P. R. Osborne, M. E. Price, F. L. Watt, and F. M. Welsh.

HONORARY MEMBER
On January 4, of this year, the members of the chapter enjoyed a steak supper at Seigler's Steak House in Walhalla, S. C. After the supper, those present returned to Clemson, where honorary membership was conferred on Mr. Lake Hugh Jameson. Mr. Jameson is a graduate of Clemson, and after spending several years in the textile industry, he has become an Instructor in Weaving and Designing in the Clemson School of Textiles.

BANQUET HELD
On April 27, the annual Phi Psi Banquet was held at the Ottaray Hotel in Greenville, S. C. An address was made by Mr. W. A. L. Sibley, Vice-President of Monarch Mills at Union, S. C. Mr. Sibley spoke on the subject of “Religion in Business.” Mr. Walton Cassidy, President of Iota Chapter, acting as Master of Ceremonies, gave a brief summary of Chapter activities and introduced the new officers.

Mr. Sibley was introduced by Mr. John Wigginton, Director of the American Cotton Manufacturer's Institute office at Clemson. The banquet was a great success, and everyone had a wonderful time.

NEW OFFICERS
At a regular meeting April 14, new officers were elected to preside over the chapter for the coming year. Edward E. Cothran was chosen as President, with Alvin H. Clarke, Vice-President, Furman Leroy Watt, Senior Warden, and Luther J. Sigmon, Junior Warden. George A. Mobley, present Secretary-Treasurer, was re-elected in the same capacity. The retiring officers are Walton B. Cassidy, President; W. Clyde Hayes, Vice-President; William G. Raines, Senior Warden; and Bernie Fleisher, Junior Warden.

NATIONAL CONVENTION
Mr. Walton B. Cassidy and Mr. Edward E. Cothran attended the annual Phi Psi National Convention as delegates from Iota Chapter. The Convention was held May 4, 5 and 6, in Sarasota, Florida. Our display represented all departments at Clemson, and we feel that it showed a good cross-section of the products of each department. The display won the second prize of fifty dollars.

PHI PSI MEMBERS RECEIVE AWARDS
At Scholarship Recognition Day exercises May 2, four Phi Psi men were honored with awards and scholarships. Walton Cassidy, member of Phi Eta Sigma, Phi Psi, and Phi Kappa Phi, received the Phi Eta Sigma key awarded to the graduating Senior with the highest scholastic standing in Clemson. He also received the National Cotton Manufacturer's Association award for the student doing the most outstanding work in textiles.

Walter L. Thompson, Textile Chemistry Major from Belton, S. C., received the American Association of Textile Chemists and Colorists award for the most outstanding work in Textile Chemistry. Last year, Mr. Thompson received the annual Textron Scholarship awarded to the Junior majoring in textiles with the highest scholastic average.

The annual Phi Psi award for this year went to Mr. James F. Cathcart, who graduated in February. The Phi Kappa Phi award to the Junior with the highest scholastic record went to George A. Mobley.

National Textile Manufacturing Society Formed

by Bob Bradley—TM-'54

Students in the Clemson School of Textiles have again stepped out in front of the other textile schools of the nation—this time to form the Alpha Chapter of the National Textile Manufacturing Society. The
club was formed in order to bring about a more intimate relationship between the textile industry and the undergraduates of the textile manufacturing school.

Some months ago several students here approached Professor T. A. Campbell, Jr., about this club. Walton Cassidy, Max Hance and a few others were instrumental in the idea. After several more talks with Prof. Campbell, a meeting was called for all students at Clemson majoring in textile manufacturing. To the surprise of many, 88 turned out for the charter meeting.

Another meeting was held two weeks later and a few more names were added as charter members. The club now has a membership of 133. The first two or three meetings were organizational, with officers being elected and a constitution being drawn up. Walton Cassidy was elected as temporary president, but since that time, permanent officers have been chosen for the entire year.

Max Hance is now president of the group. Other officers are Dave Crawford, Vice-President; C. J. Whitehead, Jr., Secretary; Reid Horton, Treasurer; J. G. McCants, Sergeant-at-Arms; G. T. McLeod, Corresponding Secretary, and Bob Bradley, Publicity Secretary. They will hold office for the remainder of the year.

Members taken in at any future date will be voted in by the present members of the club. The charter group decided that only juniors and seniors shall be voted into the club. Membership dues are one dollar for one semester. Elected members will be assessed two and one-half dollars, with one dollar of this being sent to the National Organization.

As soon as the club at Clemson is fully organized, other schools having a textile manufacturing course in the curriculum will be contacted in the hope of forming clubs on the individual campuses. Officials at Clemson have expressed hope that within a short time the club will grow in national scope as have other honorary and professional fraternities.

Two meetings a month are now being held here. Prof. Campbell has been lining up some interesting programs, both educational and entertaining. Mr. Donald Marshall, a Clemson graduate now with the Draper Loom Corp. in Spartanburg, was on the campus at the fourth meeting of the club to show a movie on the latest Draper looms. Other such programs are now being planned.

The original group adopted white and purple as the official colors of the organization. The seal is a coat of arms containing a bale of cotton, a cone of yarn and a bolt of cloth. It is the expressed hope of the few men who first conceived the idea, the charter members and officials at Clemson, that in future years this National Textile Manufacturing Society will rank with other college fraternities over the country.

Many great things have come out of this great college. This club could easily be added to the list.

American Society Of Textile Engineering Activities

The recent meeting of the A. S. T. E. was devoted to plans for incorporating the local chapter. The Lowell Engineering Society of Lowell, Massachusetts has submitted a revised Constitution to the A. S. T. E. to meet with possible national expansion. However, the ratification of the new Constitution is pending.

Mr. Felix Montgomery of Georgia Tech visited Clemson recently to gather information concerning the establishment of a chapter of the A. S. T. E. there. The Clemson Chapter is looking with much anticipation to the outcome of the movements to Georgia Tech and of the Lowell Engineering Society.

Seven new members were initiated into the Society at the last meeting. The new members are: W. T. Holliday, Greer; C. W. Kennedy, Greenville; F. M. Welsh, Jr., Clemson; C. K. Bailey, Lockhart; L. W. Long, Conway; S. J. Courtenary, Greenville; and J. S. Carlisle, Spartanburg.

All members are urged to get in contact with any of the club officers concerning the annual club banquet to be held at the Clemson House.

BOBBIN AND BEAKER

He parked on a lonely country road, turned to his girl, and said: "Are you a Camel or a Chesterfield?"

Puzzled, the girl asked, "Why?"

"Do you satisfy or do you walk a mile?"

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INDUSTRIAL ENGINEERS
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The American System Of Worsted Spinning

(Continued from Page 5)

ed the Casablanca system on some of its frames in 1932. Karl B. Nixon, a 1928 graduate of Georgia Tech, began to experiment with making worsted yarn on one of these frames. The first step was to increase the spacing of the rolls and lengthen the aprons; this made it necessary to redesign the stands, cradles, stirrups and saddles. These changes made it possible to spin fibers up to three inches in length. In order to run even longer staple all the spacings were increased again, longer aprons were installed, all the attachments were redesigned, and larger diameter rolls were installed. Then, in order to completely control fibers of different lengths, it was found necessary to positively drive both the top and bottom rolls. With these changes it became possible to spin staple lengths up to five inches.

Most of this yarn was knitted into jersey cloth, but some of it was woven into fabric by George Carson at the National Dixie Mill, then operating in Newnan. The slump in textiles in 1937 put a stop to these experiments. In 1938, Wyllys H. Taylor joined the Newnan organization, bringing about an association with Karl Nixon, and permitting a co-ordinated effort by the Newnan organization to perfect worsted spinning on their especially adapted machinery. Much credit is due to the entire organization for the enthusiasm, persistance, and skill with which they carried this development through to completion.

After Newnan developed the spinning process, work was begun on the preparatory processes. This was done as rapidly as new machinery could be designed or attachments designed for the machines then in use. Much of the machinery was made to Newnan’s specifications by the Whitin Machine Works. Whitin, at first, considered Newnan to be mildly insane; this could best be expressed by the statement: “We don’t think that it will run, but if Newnan wants it, go ahead and make it for them!”. Actually, minor changes and adjustments were made to all of this machinery after Newnan received it.

When it was found that these experiments gave effective results, this company began to produce worsted yarns for the market. By 1939, Newnan was spinning worsted knitting and weaving yarns, and by 1940 it was weaving worsted goods on its own looms. Actually there was very little of this system which could be patented, so it was decided to keep this process closely screened and run it as

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*Reg. U. S. Pat. Office
This system of worsted yarn manufacture was first called the Newnan System and later changed to its present name. The name, American System, was suggested by Francois Cleyn in an article published by Textile World in April, 1948. The name is used for the process of manufacturing worsted yarns and fabrics on long draft cotton machinery. The American System used the principles of spinning originated by Newnan. The preparatory processes, which are still being developed, are different from those used by Newnan.

The Whitin Machine Works has played a large part in the development of the American System. In fact, a fair claim would be that Newnan originated the system and Whitin developed it. Most of this development was carried on under the supervision of R. J. McConnell, Vice-President of Whitin Machine Works. Since the machinery for this new process has been placed on the market, there has been much experimentation and more development by the purchasers. No system such as this is perfect at birth, and this development should go on for years.

The American System is neither a true cotton process, nor is it similar to the French or Bradford systems; yet it produces yarns equal to the best of these two methods. One of the features of this system is its excellent adaptability to running synthetic fibers or blends of fibers. Among the fibers or blends of fibers successfully run on this system are: cotton, wool, rayon, nylon, Orlon, Fiber V, Dynel, Saran, Kemstrand, and other synthetic fibers. Another surprising feature is the brilliance and depth of color after it is dyed. This is evidently due to the spinning process, because the weaving and finishing processes are standard.

Whitin Machine Works reports that, in addition to the machinery running in this country, a substantial number of spindles have been exported to Europe. France, Norway, Sweden, and Holland all have installations of the American System.

It is the opinion of many prominent textile executives that in the future the woolen and worsted industry will change to a low-cost, high-production yarn manufacturing system. This change will most probably be in the direction in which the American System has pioneered. The textile industry has developed tremendously during the last decade, and now there are unlimited horizons for technical men who have chosen this as their life's work.

---Bobbina and Beaker---

Sign in a real estate office:

"GET LOTS WHILE YOU'RE YOUNG"

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Gaston County features that save time and money; eliminate costly guesswork and waste...

**POSITIVE CONTROL**... From the loading to the unloading of the kiers, every phase of the dyeing operation is under positive control. Less skilled help is required because all machines are equipped with automatic temperature controls, automatic dye liquor flow reversing mechanisms, patented two-way running wash system, and dye liquor flow controls.

**ACCURACY IN MATCHING COLORS**... Robot DYEMASTER controls provide permanent records for matching colors quickly and perfectly.

**FLEXIBILITY**... Machines designed for package dyeing only can be furnished for 1%” or %” perforated tubes, spiral springs, wool tops, Barber-Coleman cheeses, or any other size perforated tube.

**ALL MACHINES AVAILABLE IN STAINLESS STEEL OR NICKEL IRON**... Extremely compact in design, machines are available in single or multiple kier set-ups, ranging from 1 to 2000 pounds. We also build Combination Beam and Package Dyeing machines.

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TWENTY-FOUR  
THE BOBBIN AND BEAKER
Where Are They Now . . .?
(Continued from Page 15)


Future graduates? Their hopes and ambitions are yet to be fulfilled, but in the years to come many of them will also be on the long roster of the Clemson men in the textile industry.

BOBBIN AND BEAKER

A girl just arrived here from the East, and took a position with a feed store. She was warned that Kansas farmers were great joshers, so she made up her mind not to be “taken in” by them. The first morning a farmer came in and asked for some shorts (ground corn) for his pigs, and the girl replied, “I’m sorry, but we’re out of pig shorts, but how about some nice brassieres for your cows?”

BOBBIN AND BEAKER

Wife: “You know, I suspect that my husband has a love affair with his stenographer.”

Maid: “I don’t believe it. You’re just trying to make me jealous.”

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The BOBBIN & BEAKER, official student publication of the Clemson Textile School, announces the appointment of the new staff for the coming year. George A. Mobley is taking the post of Editor, with Alvin H. Clarke as Managing Editor. Gilbert W. Ballentine will serve as Assistant Managing Editor, and William H. Walker will act as Business Manager. Other officers are R. John Kay, Advertising Manager; R. L. King, Ass't Advertising Manager; Paul Hazle, Circulation Manager, with Thomas L. Yelton acting as his assistant. Jack Trimmier is the staff photographer.

New York's Museum of Natural History has boasted of the countless art-lovers who came to see wonders. But when a comfort station was erected on a near-by corner, museum attendance fell off 100,000.

The professor of chemistry was giving a lesson on the explosive qualities of different chemical combinations.

"This," he explained, "is one of the most dangerous explosives known. If I am in the slightest degree wrong in my experiment we are likely to be blown through the roof. Kindly come a little closer, so that you may follow me better."

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SPRING, 1951

Left to right, front row, Harry G. Batson, Circulation Manager; Paul V. Hazle, Asst. Circulation Manager; William H. Walker, Contributing Editor; Walton B. Cassidy, Managing Editor; George E. Mobley, Co-Editor. Back row Alvin H. Clarke, Asst. Managing Editor; Gilbert W. Ballentine, Contributing Editor; William D. Bozard, Asst. Advertising Manager; W. Clyde Hayes, Contributing Editor; and R. John Kay; Advertising Manager.

Student (to clerk in bookstore), "How much is this paper?"

Clerk: "Seventy-five cents a ream."

Student: "It sure is."

---BOBBIN AND BEAKER---

What's the matter with your finger, Harry?

Oh, I was downtown getting some cigarettes yesterday and a clumsy fool stepped on my hand.

---BOBBIN AND BEAKER---

Prof. Guion: "Is the theory clear to you now?"

Alvin Clarke: "Just as clear as if it had been translated into Chinese by Gertrude Stein and read to us by a tobacco auctioneer."
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TWENTY-EIGHT THE BOBBIN AND BEAKER
type of filling numbered, the complexity of the storage problem would be minimized. There are several systems that are employed in getting the right filling to the right loom. One of the more simple methods is to have a card on each loom with the filling number and loom number on it. When the filling supply at the loom runs out, the worker can take the card off the loom and place it on the truck. When he has enough cards for a load he can refill his truck from the filling storage room and distribute the filling with a minimum of confusion.

This represents some of the many housekeeping problems that arise in the modern textile plant of today. Many of these problems can be solved by using just plain common sense while others require a little more thought. By having a good system for the movement and storage of the cotton as it passes through the mill a considerable amount of money and labor can be saved. Regular maintenance and oiling schedules should be observed and the mill executives should also think of the health conditions that prevail in the plant.
“Knowledge is apt to be ponderous, boring and ‘a bit stuffy. If, therefore, instructors make their lectures so interesting they cause pupils to sit forward on the chair edges, there is no need for later ‘cramming.’” This quotation from Earl Stanley Gardner, noted writer of detective fiction, is a goal for which all professors should strive. If a professor knows in what way he falls short of this goal, he will endeavor to improve his lectures and methods. Consequently, the following questions and answers have been compiled concerning a system which would aid instructors in reaching their goal.

Why should we grade professors? Is it to retaliate for the low grades and long assignments that some of them give us? I do not believe that this should be the sole aim of a grading system for the preferences, but I do think that such a system would be beneficial to the instructors as well as the students.

Has such a system ever been tried? Yes. It is now in operation at N. C. State and Wake Forest, and even in the Engineering Department at Clemson. The University of Iowa also has such a system.

How does it work? Who conducts the tests? Who gives the Grades? Here is the way it works in the Engineering Department at Clemson. The members of Tau Beta Pi, the Engineering Honorary Fraternity, compiled a list of twelve qualifications. Each student in a class was given a copy, and the student was supposed to grade the professor teaching that class on each qualification, ranging from 5 for superior to 1 or 0 for definitely inferior. The student was supposed to be as fair and unbiased as he could, and grade the instructor in accordance with his honest opinion. The sheets were then collected, and the average grade compiled from the sheets. The professors were then rated according to their percent on the test and their relative standing in the faculty.

What are the advantages of such a system? Such a program would give a good basis for the instructor to determine how he stands with the students, and let him see the reason why students do not sign up his courses except as a last resort. It shows a professor how he could improve his technique, and make his courses more interesting to the students. In some schools, it is mandatory that a professor maintain a fair grade on these yearly grading tests to remain on the faculty. I believe that such a system would be helpful to the Textile School, in that it would let the professors know how they stand with the textile student body as a whole. It would make an instructor more conscientious in his teaching and in the presentation of the subject.
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