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 Contracts for three months, or longer will be made at reduced rates. All communications which subserve private interests will be charged for as advertisements.
 Obituaries and tributes of respect will be charged for.
 The Sumter Watchman was founded in 1850 and the True Southron in 1844. The Watchman and Southron now has the combined circulation and influence of both of the old papers, and is manifestly the best advertising medium in Sumter.

SUNSHINE A GERMICIDE.
 Tests Show That Germs of Disease Can Not Survive When Exposed to the Sun.

Sunshine is an amazingly potent germicide for the farm housekeeper and the dairy and stables. The practice of exposing cooking and other utensils used in connection with food to direct sunlight makes use of this fact, although comparatively few appreciate exactly the work done by the sun in this regard. Probably only those who are acquainted with tests which have actually been made realize how quickly sunshine kills disease germs exposed to it. Hence the following tests may be generally instructive and interesting.

A pastry, creamy mass of tuberculous material, which was proved to contain uncountable numbers of virulent tubercle bacilli, was obtained from a tuberculous cow and spread in thin smooth translucent layers on sheets of glass, pieces of wood, and strips of muslin. Some of the sheets of glass, pieces of wood, and strips of muslin were then placed outdoors on a moderately warm, clear, calm day where the sun could shine on them, and an equal number were placed in a dark room. After 15 minutes exposure to the sun, the tuberculous material on the glass, wood, and muslin still contained large numbers of living, virulent tubercle bacilli, which were proved to be fully capable of causing tuberculosis, but after 30 minutes exposure to the sun no living tubercle bacilli could be found; every test that could be made proved that they were all dead.

Similar tests with quite large opaque masses of tuberculous material, larger and denser than any tuberculous person is apt to expectorate, proved that the bacilli in such masses on glass are still alive after 4, but entirely dead in less than 8 hours, and still alive in the material on wood and muslin after 8, but dead in less than 16 hours.

The tuberculous material in thin layers on glass, wood, and muslin, kept in a dark room, was proved to contain fully virulent, living tubercle bacilli after 30 days. The contrast is remarkable, tubercle bacilli of the same kind, on the same kind of material, dying in a smaller number of minutes in the sunshine than the number of days they remained alive in a dark room.

As most varieties of disease germs are more easily destroyed by germicides than tubercle bacilli, and as tubercle bacilli, in the thin layers in which they are likely to adhere to clothing, blankets, rugs, draperies, furniture, walls, floors, etc., are killed by the rays of the sun in less than half an hour, though they remain alive in dark places a month and longer, it is reasonable to draw the following conclusions:

- As a general sanitary principle it is desirable that all dwellings, stables, etc., should be so constructed that an abundance of sunshine can reach their interiors.
- As a general protective measure against disease germs, it is an excellent practice to expose utensils for handling milk, and milk cans after they have been cleaned, to direct sunlight, and to hang or spread wearing apparel, blankets, bedding, rugs, horse blankets, etc., periodically where the sun can shine on all parts of them.

Real Estate Transfers.

Mrs. M. C. Stubbs to Martha Joyner and Evangeline Joyner Edwards, lot on Manning Avenue, \$400.
 W. W. Sumter to Mrs. Julia V. Rees, lot in city, \$325.
 A. Clarence Duffant to Adelaide E. Ricker, lot on Hampton Avenue, \$2,500.
 Alice Alston to David Ragin, 7 acres in county, \$70.
 Perry Moses and Rosalie V. Moses to R. Virginia Phelps, lot on North Washington street, \$12,000 and other considerations.
 E. J. Ard, Eugenia Kelly, H. B. Hodge and Elisha H. Hodge, to Mattie W. Davis, their right in 72 acres in county, \$5 and other considerations.

TEACH FARMING IN SCHOOLS.

Extension Department of Clemson College Will Cooperate With Rural Schools of State.

Clemson College, Nov. 22.—The extension division of Clemson college, at the request of the State superintendent of education and the county superintendents' State association, has entered into an agreement to cooperate with the educational forces of South Carolina in teaching agriculture in the public schools of the State. The division has issued bulletin No. 11, "School Room Work for Club Members and Others," outlining the character of work to be done and naming the bulletins and texts necessary to the execution of this cooperative agreement.

The extension division has also prepared a supplementary text book in agriculture, with special reference to South Carolina conditions, and the State superintendent of education has agreed to have this text published and sold at actual cost by the various county school book depositories. This text book, "Agriculture for School and Farm," has received hearty indorsement from educators and others in this and other Southern States as an appropriate book for study by pupils, teachers and farmers. The book is in catechism form, appropriate for use in the sixth and seventh grades, and any teacher, whether agriculturally trained or not, can teach it and learn something of the subject at the same time.

In addition to class room work, a miniature farm is to be conducted on or near the school grounds for teaching the arts as well as the science of agriculture.

The essentials alone will be taught and only a short period each day will be required to teach, even in the sixth and seventh grades, principles which, if put into practice judiciously, will revolutionize the agriculture of the State within five years, double yields, and cut fertilizer expenses at least in two.

Clemson college will provide a supervisor of agricultural instruction in the public schools. He will work in close cooperation with the public educational forces of the State in introducing and developing this work in the schools.

It is realized that only a small percentage of the public school population would or could ever receive such training otherwise, from lack of opportunity or desire or both to attend college. It is proposed, therefore, to digest the subject of scientific agriculture and to give it to all the children in a sort of emulsion form ready for assimilation, and for practical application. In this way it is hoped to prepare them for their life work directly, or for higher education, should such be desired or available.

Thanksgiving Holidays.

The City Schools have just finished the examinations for the first quarter. These were so scheduled as to be completed just before the Thanksgiving holidays, in order that the little break in the work would come just at this time. The holidays will last until Monday. The reports will be issued on that day and by then the teachers will have ascertained the points that need to be particularly stressed, as revealed by the examination papers. It has been a custom for many years, as it is in most of the schools, to give both Friday and Thursday for holidays at Thanksgiving, and the custom has proved to be a wise one.

Death.

James E. Holladay died at his home at Summerton on Monday afternoon after an illness of about five days, although he had been in bad health for about two years, aged about 79 years. The funeral services were held at the Summerton cemetery on Tuesday afternoon, where interment took place.
 Mr. Holladay is survived by Mrs. Fannie Holladay, his second wife, two sons, Messrs. William J. of Brunson, S. C., and P. J. Holladay of Summerton, two daughters, Mrs. Essie E. Davis of Brogdon, and Mrs. A. K. Bernshouse, Sumter.

SUMTER COTTON MARKET.

Corrected Daily by Ernest Field, Cotton Buyer.
 Good Middling 11 7-8.
 Strict Middling 11.
 Middling 10 7-8.
 Strict Low Middling 10 3-8.
 Low Middling 9 7-8.
 Staple cotton 14 to 17c.

NEW YORK COTTON MARKET.

Yest'dys
 Open High Low Close
 Jan. . . 11.64 11.83 11.64 11.82 11.67
 Feb. . . 11.92 12.11 11.92 12.10 11.95
 May. . . 12.11 12.29 12.11 12.29 12.12

HAMMOND A GENIUS.

The Naval Authorities Take up His Wireless Control for Torpedoes.

(Charles W. Duke, in the Philadelphia Ledger.)

John Hays Hammond, Jr., will live in history as the inventor of wireless control for torpedoes. Only last week he visited Secretary Daniels and conferred on the accomplishment of his invention. Army engineers have recommended purchase by the government of his apparatus and ideas, after exhaustive tests conducted under the eye of experts.

Japan got a line on the wonders of Hammond's "electric dogs" and made him a fabulous offer. Without telling Uncle Sam anything about it, Hammond turned down the offer. His experiments were then just on the turning point to success and since the Japanese offer he has made still greater advancements.

Hammond's wireless-torpedoes will virtually make the second line of defense impregnable. That's what the young inventor modestly claimed for his work when United States experts first began looking over the results of his years of research.

Germany has shown the world wonders in the line of submarines. But Germany had no way to guide a torpedo to its mark after it was launched. They depend entirely on the accuracy of their aim and their careful mathematical calculations. Hammond goes further. His torpedo set in motion can be controlled by the human voice. Simply in the principle of the control of mind over matter. Hammond's torpedo on the crest of the wave can be turned right or left, forward or backward, by a wireless impulse ashore, until crashing eventually end-on into the target aimed at.

In the dirigible raids the Germans have let loose indiscriminate volleys of fire darts and explosive bombs. In the further elaboration of Hammond's apparatus a missile can be launched in midair and then, by the manipulation of wireless control, directed at any desired mark. It is entirely possible that in the very near future, under the direction of Hammond, a shell from a monster 16-inch coast defense gun can be similarly directed after leaving the muzzle of the weapon to hit any desired mark.

From a pretty little rustic tea-house on the high cliff fronting his home, whence he directed most of his experiments, Hammond, Jr., told me of his years of endeavor. High above us sang the antennae stretching between two towering wireless masts. These masts rise 300 feet above their granite bases and are said to be the highest wooden wireless masts in the world. They are insured at Lloyds' for \$10,000, and are all part of the apparatus with which Hammond worked out his inventions.

In another laboratory down near the water's edge Hammond showed me the uncanny little electric "dogs" from whence he first got his inspiration for the wireless-controlled weapon of war.

They are uncanny because they are inanimate, dumb-looking things which, once you point a flashlight at them, follow you about with dogged persistence. Turn your flashlight and walk in an opposite direction and the electric "dogs" follow you on. The "dog" has eyes of bulging glass; his body is a long walnut box. Inside the box is a storage battery, an electric motor, solenoid magnets, selenium discs and relays. The "dog" gets about on three wheel "legs," and his tail is an electric switch.

Hammond first brought out a "wireless boat." It was a 40-foot craft with a speed of 33 miles an hour and equipped with the latest in radio-dynamic apparatus. The vessel was a stepping stone from the "electric dog" of the laboratory. In a short time this small craft was making trips to sea under the power of her own engines, but without a single soul aboard. From a lookout station high up on the cliff Hammond shot the tiny craft back and forth over a 10-mile course. At times the boat flew along at the high speed of a torpedo destroyer.

Hammond had all manner of discouragements. He first used a type of Marconi coherer, which proved unreliable and not at all suited for his purpose. The coherer was used on the harbor boat to receive wireless impulses from the shore. For a time Hammond was in despair. He toured all the capitals of Europe and consulted with the world's most famous radio-telegraphers.

Returning home in despair, he set about the evolution of a coherer of his own make. It is hardly necessary to say that this little instrument is one of the keystones of Hammond's success and jealously guarded deep down in his mind.

The boat Radio was equipped with the new instrument. And then began the series of experiments which have brought Hammond into his own. From his lookout on the hill Hammond would guide the boat out to sea between the encircling rocks that mark the entrance to Gloucester harbor. By

the touch of a key on shore he would release the power of a hundred horses. Flashing out over the dark waters that power was concentrated upon the radio-dynamic equipment of the boat.

A fishing smack looms up in the distance. It is an imaginary battleship. Searchlights from shore spot it out. Instantly the tiny wireless boat tacks in her course and shoots straight for the fishing vessel. Straight up under the lee of the boat drives the imaginary torpedo. Just when it seems a crash is inevitable the torpedo craft turns off gracefully and the fishermen blink their relief in the glow of the searchlight.

Fi-Fi of The Toy Shop to Be Big Attraction.

Next week the affair of importance theatrically in Sumter is the big home talent play "Fi-Fi of the Toy Shop" which will be given December 2 (next Wednesday) for the benefit of Dick Anderson chapter, U. D. C.

George E. Shaw, a professional director, has been in town ten days rehearsing this play, which has been given over a thousand times in every part of the United States and in Canada, and which promises to be the best home talent show ever staged here. One hundred and fifty people, little fellows and grown-ups, compose the cast featuring the best talent in Sumter.

The play has just been staged in Darlington for the public schools and brought out one of the largest audiences that ever made its way into the Darlington Theatre. Great interest is already beginning to manifest itself in Sumter and the ladies plan to make the play one long to be remembered in Sumter. Mr. Shaw has stated that he is pleased with the talent submitted and says that Sumter is fortunate in having such a good calibre of amateurs.

Marriage License Record.

Licenses to marry have been granted the following colored couples: Samuel Mitchell and Camilla L. Simmons, Dalzell; Fred Rose and Lillian White, Sumter; Lucius Smith and Annie James, Alcohu; Carl Haynsworth and Mary Dowling, Dalzell; Willie Johnson and Rachel Jones; Tommie Wilso and Emma Brooks, Mayesville; Charlie Haynsworth and Almata Ballard, Sumter.

Geometry Required.

Plato is said to have written over his door: "Let no one ignorant of geometry enter here." Today such a restriction would reduce his visiting list. Perhaps outside the professional mathematicians he would have no one at all. All the artists, the philanthropists, the historians, to say nothing of those ladies and gentlemen of leisure whose critical faculties are so importantly developed nowadays, would certainly be absent, and, worse still, would suffer very little at their exclusion. Yet going back into the centuries for guests, a distinguished company might have been assembled of those who, without being famous merely for mathematical studies, were known to have understood and loved the subject. The Greek philosophers would have been there in a body, Alphonse X, Omar Khayyam, Albert Durer, Leonardo da Vinci, Descartes, Pascal, Napoleon and Lewis Carroll.

Notice, Notice, Notice.

For the benefit of the Dalzell Methodist church, big barbecue and oyster supper combined at the residence of Mr. T. M. Crosswell, Dalzell, S. C., on Tuesday evening, November 30th, 8:30 P. M. Everybody invited to come.
 Committee.

Notice.

My farm northwest of Sumter, on Stateburg-Providence road, adjoining lands of Holman and Folsom, and my land east of Sumter on the Mayesville road, adjoining lands of Shaw and Reams, are posted and all persons are warned not to trespass on same by hunting or otherwise.
 C. P. OSTEEN.

WANTED—My friends to know that I have installed a modern gasoline filling station at my store and will be pleased to furnish gasoline at Sumter prices. J. H. Myers.

FOR SALE—Fulcaster Wheat; Appier oats; Appier oats with vetch, mixed; Bancroft oats; Fulghum oats (more prolific and matures three weeks earlier.) All cleaned and faulty grains and grass seed removed. C. P. Osteen, Sumter, S. C.



New Fall Derbys

Here's the Newest Style of all Stiff Hats for Fall wear.

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Other Styles \$1.50 to \$5.

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