BY HENRY S. HARTZOG. To the Editor of the Cotton Plant:

An agricultural experiment station which scientific and practical investigations are made with a view to improving the methods of agriculture or introducing new crops or industries.' Agriculture is both a science and an art. It is the practical application of many sciences. The experiment station worker, therefore, is a scientist

There are some successful experilittle about practical farming. For instance, a botanist may study the effective remedies and yet may be a search.

Scientific investigations are tedious and tabulate their records and draw and must have proper laboratory facili- has been moving forward smoothly ties. Very few farmers in practical and prosperously. The Staff at pres life have the time, or the money, or the training for this work in its higher forms. We cannot depend entirely upon individual enterprise for agricultural experiments. In mechanics it is | S. otherwise. The inventor of a toy Brackett, assistant chemist; secures a patent and makes a fortune. The mechanic has the incentive of quick and enormous profits for inventive genius. Some farmers, it is true, who develop new varieties of crops but even this cannot last long for the seeds soon become widely distributed. The farmer who works out new methods helps himself, but gets no royalty from others who adopt and use his for compost, though millions are benefited, will not make as much money as the inventor of a tin rattle.

It may be added too that the station worker studies nature in its most elusive forms, and it requires longer research and broader scientific knowledge to find original truths in agriculture than in mechanics. Recognizing these facts and the

axiom of the ages that agriculture is the basis of all wealth, the Federal Government has established in the various States and Territories agricultural experiment stations.

On March 2, 1887, the tollowing Act, popularly known as the Hatch Act, was passed by Congress :
SECTION 1. * * That in order

to aid in acquiring and diffusing among the people of the United States useful practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established under direction of the college or colleges or agricultural department of colleges in each State or Territory established, or which may bereafter be established, in accordance with the provisions of an act approved July 2, 1862, entitled "An Act Donating Public Lands to the Several States and Territories which may Provide Colleges for the Benefit of Agriculture and the Mechanic Arts," or any of the supplements to said act, a department to be known and desig nated as an "Agricultural Experiment Station." * * * SEC. 2. That it shall be the object

and duty of said experiment stations to conduct original researchs or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with ical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and waters; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for demestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying condi tions and needs of the respective States or Territories.

The first section of this Act requires stations to be under the direction of the agricultural colleges. In all the States except Georgia and Ohio the stations are located on or near the college grounds. In the States of Alabama, Connecticut, New Jersey and New York more than one station is maintained by the aid of funds from the States.

There are some advantages in having the colleges and the stations working together. Specialists are employed who divide their time between teaching college classes, and working in the station. Thus money is saved. The station workers have access to the college laboratories. The agricultural students have a chance to study the experiments in progress.

Each State receives fifteen thousand dollars annually for the experiment station. The expenditures are regulated by the college trustees, but an auditor from Washington examines the accounts once a year to see that the money is expended in conformity with the act of Congress. Every item is rigidly scrutinized, and the furds cannot be diverted to other purposes than the legitimate station work. I dwell upon this because some who are not acquainted with the law think that the Hatch fund is used in part in South Carolina to support Clemson

College. The law will not permit us to apply any of this fund to college

The last clause of the act "having due regard to the varying conditions and needs of the respective States and territories" is worthy of special notice. The South Carolina station is intended primarily to help the farmers of South Carolina. In some of the Western States the irrigation engineer is one of the most important officers of the station staff. Our station has no specialist for irrigation because local conditions do not demand one. There are now in the United States fifty-one stations that receive Federal funds. Those stations employ 557 workers. Although these stations have been in operation but twelve years many subtantial results have been accomplish-

ed. The main work thus far has been

workers during the past decade we may reasonably expect the discovery of principles of incalculable value in results. has been defined as an "institution in the near future. The time element should not be forgotten. There are completed in the short space of twelve years. At Rothamsted, England, one wheat experiment has been running fifty years. This statement is not made by way of apology for the past work of the experiment stations, for whose primary business is to apply his they have already discovered many special knowledge along original lines new things of great economic value, for the benefit of agriculture. A short sketch of the South Caro-

ment station workers who know very lina station at Clemson College may not be inappropriate. This station causes of rice smut, and may prescribe direction of the University of South Carolina in 1887. Sub-stations were failure as a practical rice planter. But established in Darlington and Spartan- expended annually on this work, we in some lines of experimentation a burg counties. In 1890 the station knowledge of practical farming is absolutely essential for intelligent reinto the continuity of the experiments. In this respect the South Carolina staand expensive. Work of this kind tion has been pecuharly unfortunate. must be done by trained specialists On account of death and resignations who have eyes to see, who can record five changes were made in the adminwhat they have seen, who can correlate istration of the station in the short space of nine years. This has somecorrect conclusions. They must under- what retarded the progress of the stastand the use of delicate apparatus, tion. Within recent years the work

ent is as follows : Henry S. Hartzog, director; J. S. Newman, vice director and agriculturist : M. B. Hardin, chief chemist : F. Shiver, assistant chemist; R. N. Nesom, veterinarian; C. C. McDonnell, assistant chemist; P. H. Rolfs, botanist and bacteriologist; C. M. Conner, animal husbandry; E. Walker, Entomologist; C. C. Newman, assisget good returns from the saie of seeds, tant horticulturist; B. F. Robertson, assistant chemist.

As the duties of the director are of a financial nature the immedia agement of the experiment work entrusted to the vice director. South methods. The man who evolves from | Carolina is fortunate in having for this long experience a successful formula important position a man of such rich and varied experience as Col. Newman. Since the establishment of the station the following bulletins bave been published .

> OLD SERIES. 1886—Report of Experiment Farm,

1882—Roport of Experiment Farm,
1888—No. 1, *Tests of varieties of cotton,
No. 2, *Tests of cot mercial seeds.
No. 3, *Tests of cot mercial seeds.
No. 4, *Analyses of fortilizers and feeding-stuffs.

1889—No. 4, *Bntomology,
No. 5, *Oats and wheat.
No. 6, Hog cholera.
No. 7, Meteorology,
1890—No. 8, Chemic -1 statistics of corn crop
in South Carolina.
Maize fodder ensilage; cow-peas
as a forage crop,
Composition of sojar bean vines.
Annual report.

NEW SERIES. No. 1, *Analyses of commercial fertilizers, Part 1.

No. 2, *Cotton experiments with varieties and fertilizers,
No. 3, *Analyses commercial fertilizers,
Part 2. No. 4, Fertilizer tests with wheat. No. 5, Methods of keeping sweet pota-toes.
1:92—No. 8, Analyses of commercial fortil-

No. 7 Experiments with wheat and

No. 7 Experiments with wheat and onts.
Annual report.
No. 8, Investigation chemical composition cottonseed meal.
1863—No. 9, Experiments with Irish potatoes.
No. 10, Notes on varieties of beans.
No. 11, Analyses commercial fertilizers,
Part 1.
No. 2, Cooperative soil tests of fertilizers,
Part 2.
No. 13, Analyses commercial fertilizers,
Part 2.
No. 14, Experiments with corn. No. 14, Experiments with corn.

No. 14. Experiments with corn.
Annual report.
-No. 15. Fertilizer experiments with corn.
No. 16. Ex; eriments with tomatoes.
No. 17. Analyses commercial fertilizers.
No. 18. Fertilizer experiments with cot-Annual report,
Annual report,
Dairying,
Analyses commercial fertilizers,
Technical,
Colie in horses and mules,
Annual report,
Lameness in horses,
Analyses commercial fertilizers

Annual report.

Annual report.

No. 24, Analyses commercial fertilizers, in two parts.

No. 15, *Distemper in horses and mules.

No. 26, *Founder in horses and red water

No. 27, *Wounds and their treatment.
Annual report.
1897—No. 28, The sweet potato as a starchproducer.
No. 29, Analyses commercial fertilizers.
No. 50, Determination of starch in the

No. 30, Determination of starch in the sweet potato.
1 o. 51, Hog cholera and swine plague.
No. 52, Protection and improvement of worn soils.
Annual report.
1898—No. 58, Tests of dair; methods and apparatus. ratus. Comparative tests of butter fat.

No. 14, Sugar beets.
No. 32, Analyses commercial fertilizers.
No. 36, Diseases of plants.
No. 37, Wheat.
1819—No. 38, Asparagus rust in South Caro

No. 39, Suggestions to auxiliary clubs.
No. 40, Farm manures for cotton.
No. 41, Rice blust and a new rice smut.
No. 42, Varieties of cotten.
No. 42, Analyses commercial fertilizers.
No. 44, Corn. No. 42, Analyses commercial fertilizers. No. 44, Corn. No. 45, Analyses of fertilizers. No. 46, Cotton. No. 47, Chemical study Sea Island cotton.

*Numbers marked with stars are exhausted

The law requires us to issue four bulletins annually. At present we have seven thousand and five hundred names on the mailing list. These bul letins are sent free to all who ask for

In addition to the issuing of the regular bulletins hundreds of letters of inquiry are written every year to the for advice upon special lines. These letters receive prompt and courteous attention, though at times the clerical work becomes so heavy that it is almost burdensome.

The various departments of the College and Experiment Station will furnish, free of charge, advice and information on any topic pertaining to general agriculture, horticulture, botany, entomology, veterinary science, dairying, stock breeding, feeding, etc.; also analyses of fertilizers, marls, clays, waters, and other substances, assays of ores, determinations of rocks and minerals, tests of bricks, cements, building stones, illuminating oils, calibration of electrical instruments, etc. The departments can not undertake

parts of poisoned animals, nor to make bacteriological examinations. All inquiries and requests should be addressed to the President, giving explicit account of conditions, difficulties, etc., as far as possible, and the matter will be referred promptly to the proper department for further correspondence. Before sending samples of any kind for examination or

tions, and thus avoid trouble and

to analyze soils, stomachs or other

It will require many years to com pletely equip our station. The buildings consist of a wooden structure, containing a library with 1,500 volumes, an office and a working room a two story barn for storing products a veterinary hospital; a greenhouse and thirty acres of land for horticultural experiments; good working laboratories for the botanist and the entomologist; a well equipped chemical de partment, and forty acres of land, embracing five of river bottom and thirtyfive of upland for agriculture proper.

Lack of space prevents us from giving even an outline of the many he collection and publication of im. interesting experiments now in progortant scientific data. Scientific de | ress in the various divisions. A mere

y a column of THE TOBACCO FIELDS OF CONyour paper. A list of the experiments under way will be given in the annual report to the Governor of the State next year, and bulletins will be pub- The Boston Transcript. lished from time to time setting forth

NECTICUT.

"The most sovereign and precious herb that ever the earth tendered to

the use of man," as Ben Johnson de-

clared tobacco to be, finds a congenial

home in the lovely valley of the Con-

requirements of this agricultural exotic

than any other portion of this part of

average of seventeen hundred pounds

to the acre, are scattered along both

banks of the Connecticut river in a belt

of the river being devoted to the pro-

duction of what is called the "Connecti-

cut broadleaf tobacco," and the west

side to the "Havana seed tobacco,"

from Havana.

which is raised from seed brought

The soil devoted to this industry is

enriched annually with an immense

amount of fertilizing material, as the

plants require rich food, and sap the

soil tremendously. The tobacco seed

is planted in the spring, and after it

is a handsome plant, with broad, glos-

ber plant, and reaches in maturity to

leaves, its full growth being reach

ed by the middle of August. The leaves

around the base of the plant are coarse

and fibrous, and are used for filling

and coarse, even more so than the bot-

ufacture of "stogies." The center

leaves are the choicest, and are used for

cigar wrappers, which call for the lest

labor and expense is involved in the

raising of these crops, as the plants requires constant watching to protect

them from encroaching weeds, bugs

and various plant ailments that con-

nive against the profits of the tobacco

severe summer hallstorms, which are

constant menace to the tobacco crop,

as the wind and hailstones tear and

mutilate the leaves, mjuring their

From the middle of August to the

middle of September the crop is har-

poles about six feet long. Skeleton

wagons, built for the purpose, cart the

filled poles which are laid across their

frames to the great tobacco sheds,

which are such a common sight through-

until the shed is filled, where it is left

of the plants left in the ground un-

mediately start a second growth of

found for this supplementary growth

fibrous. The harvested crop remains

in the sheds until December, when the

leaves are stripped from the stalks and

sorted according to condition, and then

packed in bales and shipped to the

warehouses, in Windsor and Suffield,

is called a "sweating" process, when

the leaves look as though they were

the tobacco is ready for the market. In

September the crop of the previous

variable and can only be determined by

four to six cents per pound; the better

grades, called the "binder" and "wrap-

are sold as high as 60 cents per pound.

feature of this industry is the demand

for tobacco stems, after the leaves have

been stripped from them, which are

used for fertilizing purposes, being

shipped to New York in bales by the

Hartford boat, which runs between

that city and New York, and it is a

curious and picturesque sight to see the

bales of tobacco stems being loaded on-

to the steamer at [Glastonbury and

Suffield and other little towns along the

Connecticut river by night, as the boat

the afternoon, the deck hands being

assisted in their work by the glare of

the searchlight from the boat, which

lights up the wharf and the banks and

liancy, enhanced by the pitchy black-

ness which lies beyond its meteoric flash. The cheap "filler" tobacco is

shipped to Pennsylvania, where it is

of cigars, which are made by experts.

one of the daughters of Pharaoh.

CASTORIA

For Infants and Children.

The Kind You Have Always Bought

the surroundings with a startling bril-

cured."

saleable value to a great extent.

quality of tobacco leaves.

cigars; the top leaves are also tough

height of four or five feet.

The South Carolina Experiment Station is working earnestly, methodically single experiments that cannot be and intelligently to improve the agricultural interests of the State. necticut river, between Springfield visiting inspector from Washington Mass., and Hartford, Conn., where the last year in a published interview said rich, red soil peculiar to the region that he saw many evidences of con- more nearly approaches the tropical tinued growth and improvement. No reasonable man expects the station to work an industrial revolution in a dec- the country. Tobacco farms of from ade. Our station measures up in most one to twenty-Lve acres, producing an

respects to the stations in other States. When we reflect that the Federal Government has 557 learned experiment station workers attacking with about twenty miles wide, the east side began its life at Columbia under the vigor and in a systematic and thorough way, the many problems of agriculture; and when we reflect that \$750,000 is must believe that within a comparagigantic scheme of experimentation that will attract the favorable attention of farmers.

> SEED CORN SELECTION .- Many attains a height of about six inches it farmers owning both bottom and upland is tranplanted into rows like corn. It cornfields make the mistake of using the same seed on both kinds of soils. sy leaves, shaped like those of the rub-Corn which is adapted to the soil and moisture conditions of the valleys will not do so well on the upland as will some variety that has, by several years of cultivation and selection, become with their shining, dark green leaves. The plant usually has from ten to twenty adapted to the conditions there. It is for the same reason that the large Colorado potatoes that have been grown for years under irrigation will do so poorly when used for seed in Kansas without the accustomed supply of water. It is generally the case on the farm that the corn from all the fields, both upland tom leaves, and are used in the manand bottom, is cribbed together. When the time for selection comes the largest ears are picked out irrespective of the kind of soil that grew them. As the bottom land produces the large ears it is more than likely that the bulk of the seed will be from the lower and moister portions of the facin. This is the proper seed for the lowland, but it is not so well adapted to the dryer and poorer upland as is seed that has been raised there. It is advisable to select the seed either before or at husking time, when not only the quality of the ground but the character of the individual stalk and ear can be taken into consideration. As has been suggested before, a small box attached to the side of the wagon bed into which the desirable ears can be thrown is the most practical device that can be recommended. By a little judicious selection for a series of years a strain can be established on the upland portion of any farm which will be well adapted to that or any other soils similar to location and composition. An eight inch ear from the upland will ordinarily prove better for planting on the upland than a twelve-inch ear from a draw in the lower portions of the farm.

WHAT'S THE MATTER WITH YOU?-Nearly every one you know or meet has some eccentricity you could point out, no doubt. They entertain certain views or have a peculiar way of doing things that the generality of mankind think nonsensical, and perhaps absurd. We often think of the remark of the old Quaker to his wife who said to her : "Everybody is a little queer, Mary, but thee and me, and sometimes I think thee a little queer also." We see a great many people who are considered queer because they get into some sort of a groove in farming and nothing can induce them to try to pull out and adopt up-to-date methods. passing around through the country we still see an occasional farmer who wastes his time trying to save fodder by topping his corn, or in cultivating a crop still thinks it absolutely necessary that the bar plow should first be used, throwing the dirt away from the corn. and afterward cultivating up to it. Not a few do their planting and seeding "in the moon," and no amount of argument would ever convince them that good crops could be grown if started when the "sign" wasn't right. One of your neighbors doesn't get along as well as he ought because he works without any sort of plan or system. Another fails for the reason that he is always behind with his work. While others spend too much time at cross road stores or dabble in politics in which there is no pay. If all the fellows round about you have their short comings, have you ever stopped to consider that you too may be a "little queer?" It's a good thing to know ust where our weak places are and then use some effort to strengthen them as we go along .- Farmers'

BRIMSTONE CURES DIPHTHERIA. A few years ago, when diptheria was in England, a gentleman accompanied the celebrated Doctor Field on is rounds to witness the so-called "wonderful cures," which he performed, while the patients of others were dropping on all sides. All he took with various members of the staff asking him was powder of sulphur and a quill, and with these he cured every case without exception-that is, he put a teaspoonful into a wine-glass of water, and stirred it with his finger instead of a spoon, as sulphur does not readily amalgamate with water, and on the sulphur becoming well mixed he gave it as a gargle, and in ten minutes the patient was out of danger, as brimstone kills every species of fungus in man, beast and plant in a few minutes. Instead of spitting out the gargle, and, in extreme cases, in which he had been called just in the nick of time, when the fungus was too nearly closing to allow the gargling, he blew the sulphur through a quill into the throat, and after the fungus had shrunk to allow it, then the gargling. He never lost a patient from diphtheria. Or if the patient cannot gargle, take a live coal, put it on a shovel and sprinkle a spoonful or two of the brimstone at a time upon it, let the sufferer inhale it, holding the head over it, and the fungus will die .- London Lancet.

What becomes of all the pennies? A superficial answer might be that we analysis, it is best to write for instruc- spend them, as in truth we do; but did you ever stop to consider the enormous quantities of the little copper coins turned out by the Philadelphia Mint every year? The figures are really appalling in their magnitude. There are at present about 1,000,000,000 cents in circulation, and yet the Mint is compelled to turn out nearly 4,000,-000 a month to keep up the supply. It seems as though this most common coin must in some mysterious fashion vanish in thin air, for surely nobody hoards them.

Secretary Holloway informs us that the prospect for a fine exhibit and large attendar ce is very flattering.

The Kind You Have Always Bought Be ra the

BAKING ABSOLUTELY PURE

Makes the food more delicious and wholesome ROYAL BAKING POWDER CO., NEW YORK

KNOWS NOTHING OF THEIR ORI GIN.

He Has a Letter from Arkansas Describing a Phenomena Out There Last Month-Meteors Never Hurt Anybody. A friend living in Arkansas writes

me about the recent fall of a meteor near his home, and he compliments me by asking some questions that I cannot answer. The origin of meteors and their flight and fall is yet the unsolved problem of the ages. says that on the 26th of last month, at 8 o'clock in the morning,

when there was a clear sky and not a cloud to be seen, there was a rumbling sound of thunder so weird and unnatural that it was alarming. It was like the rolling of heavy trucks over an uneven platform, only immensely louder. It was heard in all the neighboring towns, and they all telegraphed each other to know if a mill had not A growing tobacco field is a pretty blown up or a magazine exploded. sight, with its long, even rows of plants Suddenly there was an explosion in places in this vicinity. A small piece that weighed one and a half pounds fell in a field near by and was brought to town while it was yet hot. It was powder-blackened on the outside, but inside was a grayish color, and its particles shone like gold dust. Under the microscope they resembled quick-

It was a full minute from the beginning of the rumbling thunder till the explosion came, and the course of the ound was from east to west. An immense amount of care and event was so unexpected and so like the mythology of Jupiter Tongno throwing a bamb from Mt. Olympus that the near to rocks or a rock wall. My long white people were spellbound, and the negroes declared it was a warning and went to prayer.
Philosophers and astronomers have

been studying these phenomena for growers. A curious climate feature of | 2.500 years, and have not yet agreed the tobacco belt is the frexuency of upon a solution. The archives of the Chinese empire record the fall of sixteen great aerolites from 300 to 600 years before Christ. The Greeks and Romans record a number, and Aristotes and Diogenes commented upon them. So did Livy, Plutarch and Painy. They have been seen so large that the esti-mated weight of the fragments after vested. The plants are cut off close to the explosion was 30,000 pounds, and the light was so brilliant as to pale the ground, and hung upside down on the sun by day and obscure the moon by night. There is now in the Yale college cabinet a fragment that weighs 1,635 pounds. This came from near the Red river in Arkansas. Many of which are such a common sight through-out this region. Here the tobacco is specimens for the museums of colleges, stored, row upon row, tier upon tier, and all of them are composed of the same mineral ingredients-principally iron-and include copper, tin, sulphur to dry, or "cure." The denuded roots carbon and other metals known to our own earth. Not a single new sub stance has ever been discovered, and for this reason the theory obtained rank little feelers, which are called "suckers," but as yet no use has been that they were thrown up volcanoes with such force as to wander of the plant, as it is too tough and for a time in the outer atmosphere of the earth, and to revolve with the Bloemfontein (bloom-fon-tine)...... earth. But this theory has long since been abandoned, for they seem to have Boer (boo-er) an orbit of their own from west to Buitenlander (boy-ten-lont-er). east. Then came a theory that they came from the moon, and were of vot canic origin, and were thrown out with Burregerregt (buhr-ker-rekt). where they are stored. By the follow- such terrific force as to get beyond the moon's influence and within that of our earth. But this was discredited being July the baled tobacco begins what cause these fragments have been fall-ing, no doubt, for thousands of years rotting. This continues for three on the land and on the sea, and on all Ooom (ome). countries, and would have by this time Raad (rahd). months, when it dries off again and materially diminished the size and weight of the moon. La Place and Humboldt favored this moon theory for Rands (rahds hays). Senate house planets that have a motion and orbit of their own, and that orbit sometimes Connecticut tobacco are worth from comes within range of the earth's and produces a commotion-a disturbance per" tobacco, brings from 15 to 40 cents that causes the fall of some of their per pound, and some of the choicest own nebulae. Some of the children

This season has been a very profitable one for the Connecticut tobacco growers, the crop yielding between fifty and sixty thousand cases. Each come in showers as thick as snow-flakes, and fall as gently to within a fow feet of the earth and are extinguished. They fell in 1799-1833 and 1867, and each fall was on the 13th of November. But there have been minor disp ays at irregular intervals—generally about the 10th of August. 1 am old enough to remember well the "falling of the stars" in 1833. My case or bale weighs about 350 pounds. The buyers come from New York and the West in the early fall to negotiate with the growers for their crops, usually doing so after they have been harvested, although when the demand is brisk it is not unusual for competive buyers to make an offer for the field of tobac. co as it stands. This is a great risk, falling of the stars" in 1833. M however, as it is difficult to determine father held me in his arms as he stood in the portico, for I was scared. Ou what the quality of the tobacco will old negro, aunt Minty, was praying and shouting so it scared all of us proved until it has been thoroughly children. George Lester lived on the opposite side of the street, and his For the last few years there has been great demand for spotted tobacco, as mother held him in her arms. Some most of the nice imported tobacco has times in these later days I would get that appearance, so the dauntless yan-kee tobacco growers produce the de-Alexander or his brother Tom, or sired effect on their best crops by George Adair, and we could boast of the wonderful era in which we had spraying the growing leaves with potlived, and the advent of steamboats ash, which eats into them, giving them and railroads and cotton gins, and the requisite spotted appearance. The war with Cuba has advanced the price of Connecticut tobacco somewhat, but saw a night like that—but I reckon the Spaniards at Manila thought they not so much as the buyers expected as there was a large amount on hand when the war began. A very considerable

did on the 1st of May.
But this is enough about the meteors At least, it is about all that I know Joe Mulhattan, or Munchausen, madup a big fake a few years ago while was in Texas and telegraphed the fall of a meteor near Brownwood that was as big as a meeting house and had buried itself thirty feet in the earth. I was at Brownwood a few days after and the postmaster was as mad as a hornet with Joe, for telegrams came to him from all over the United States and England wanting to know about it Connecticut river by night, as the boat does not start from Hartford until 5 in had to leave there and hide out for a month or two. The postmaster answered a few and then swore off. There is one good thing about meteors They never hurt anybody. The books say it is remarkable and perhaps providential that in all the earth there is no record of one having fallen on any body or destroyed a habitation. Ter-restial lightning gets us sometimes, but celestial fires are not dangerous.

And now the next inquiry is from a

used in the manufacture of "stogies," young farmer who wants to know if it is good farming to follow grain with the latter being made by families of foreigners, men, women and children, grain. He does not say what kind of grain, but I will tell him that afteen whose labor is thus secured cheaply, making it possible to sell them at a years ago The Courier-Journal of Kenmuch less price than the better grade tucky, offered a prize of \$1,000 for the best essay on practical agriculture. Over 200 were contributed and the essay that got the prize detailed the The most curious paper-weight in writer's plan of farming in Kentucky. It was brief, very brief. He laid off the world is said to belong to the Prince of Wales. It is the mummied hand of his corn rows seven feet apart, drilled his corn eighteen inches apart, cultivated the ground thoroughly and har-rowed it; sowed wheat early and har-rowed it in. When the corn was eady to gather he drove the wagon in every sixth row and loaded from three rows each side. After the corn was all gathered he went over the cornstocks crossways with a heavy roller and rolled it all down flat on the wheat. The stocks and the clades covered it like a blanket. When the first good snow fell he sowed clover on the snow. When it rained or thawed Bears the Charty . Thickies

BILL ARP ON THE METEORS. the clover seed fell into the ground and took root, and so he had corn and wheat and clover following in rotation and made a fine crop of each. But in this region our farmers have learned the value of peas as a fertilizer and stock food, and the harvest of hay

this year will no doubt double all pre-vious records. One of my friends has a small farm near town and last year harvested a fair crop of wheat from a twenty-acre field. After the wheat was off he sowed ten acres of the ground in cow peas. Last fail he sowed it all down in wheat and this spring you could tell just where the line of peas came to. There was no difference in the quality of the land. It was all level and all alike and yet he harvest ed this year ten bushels per acre on one half and eighteen on the other Now, what caused this great difference? It was the shade of the per vines, the sbade that produces nitrogen, and nitrogen is the best of al plant food. The denser the shade the more nitrogen goes down into the soll A canebrake, a briar patch, a clover covering, an old house in a field-re move it and plant the ground that was the air cod a dark cloud formed and meteoric fragments fell at different your house and the roots will all run under it and see how luxuriant vegetaunder the house to feed-to feed on nitrogen. My wife has a wisteria vine at the end of the veranda, and in three years' time its roots had traveled un-derneath the floor and sent up sprouts twenty feet away, and for a tin did not know where they came from. A good farmer will shade everything he can. He will cover the thin and galded spots in his field with wheat straw. There is no virtue in wheat straw, but it makes shade, and that The makes nitrogen. There is no virtue in a stone or in rocks, but they make shade, and notice how plants will grow lamented friend, Dr. Berckman, me that "rocks were God's blessing to the land," and he purchased ten acres of very stony land for his vineyard and

his flower garden. It rejoices me to seen how our mid-dle Georgia farmers are locating up on wheat culture. Forty bushels to the acre. Ten years ago it would have been declared impossible. This reminds me of my old English neighbor, John Allan, who asserted that his father was never content in old Hengland with less than sixty bushels of wheat to the acre and sometimes by wheat to the acre, and sometimes he made seventy. "Sow wheat in dust and rye in mortar," was his motto. Good old John Allan. I shot his cow in my cornfield, for it was her third offense, and the old man was grieved. He never got mad, but only said know me coow worried ye, but-butmajor, I wouldent have shot your coow. I love you too well for that."

How true it is that "kind words take away wrath." BILL ARP.

DUTCH WORDS.

Here are some of the Dutch words that are oftenest in print in connection with the news of the Transvaal and their pronunciation and meaningFlower fountainFarmer

... Citizen

Burgerwacht (buhr-ker-vokt).

Johkerr (unk-hare).

hkerr (unk-hare).... Memoers of the Volks and gentlemen

own nebulae. Some of the children got too far away from their mother, I reckon.

Sometimes meteors are simply luminous and have no body to explode or strike the earth. These have periodic vibrations of thirty-four years. They Trokken (treck-on). . . to draw; to travel

Vreemdeling (frame-de-ling).... Witwatersrand (vit-vot-tersrout) Margin of the white water

-----The widow of former Governor Atkinson, of Georgia, has creat d some-thing of a sensation in business and social circles by going into the field as general State agent for fire and life in surance companies. She says her pur-pose is to make a living and educate her five children. She is already do-log well and has received letters of congratulation from numerous society

OFTEN WHEN BABY DOES ITS FIRST STEP MOTHER IS TOO WEAK TO WALK



the St. Paul railroad was much ruz zled by the little signposts along the track having the single letter "R" or "W." He asked the porter, who re-plied, "Why, sir, dem's whistle and ring posts for de engineer." The trav pondered and became only the more perplexed. In despair he repeated his question to the conductor. "Those signs are for the informa-tion of the engineer," replied the con-cucior. "He is to whistle or ring at

PUZZLING"LETTERS .- A traveler on

certain points as indicated by thes initial letters." "Yes," said the traveler, "so I understood the porter; but I thought he must be mistaken. I knew "W" stands

for wring; but how in the thunder do you spell whistle with an "R?" ----

-At least once a year it is in order to ask what becomes of the pins. The annual returns show that 280,000,000 were made in England last Where are they? It is estimated that Great Britain wastes \$1,000,000 annually by losing pins instead of sticking them neatly in a cushion, or man-fashion in a coat lapel. The Baltimore an swer to the old conundrum should again be cited. They fall to the earth and

SOUTHERN Condensed Schedule of Passenger Trains. In Effect Sept. 24th, 1899. Greenville, Washington and the East, No.12 No. 38 Daily Daily. Northbound. Dally. 1 50 p Greenville " Spartanburg.
" Gaffneys...
" Blacksburg.
" Gastonia.
" Charlotte...
Ar, Greensboro Lv. Greensboro. Ar. Danville 11 25 p 11 56 Ar. Richmond Ar. Washington...

" Baltm'e PRR.
" Philadelphia.
" New York... 6 42 n 8 00 n 10 15 n 12 43 m Atlanta, Etc.

Dally. Daily. No.11 Lv. N. Y., P. R. R. 12 15 a 4 490 "Philadelphia 3 50 a 6 55 "Baltimore... 6 22 a 9 20 "Washington... 11 15 a 10 45 Lv. Richmond... 12 01nn 11 00 . 12 01nn 11 00 p 11 00 Lv. Danville 6 02 p 5 50 a 6 10 a Ly. Norfolk . Ar. Greensboro. 8 85 p 5 15 a 7 24 p 7 05 a 7 37 a 10 00 p 9 25 a 12 05m 10 49 p 10 07 a 1 12 p 11 31 p 10 45 a 2 06 p 11 46 p 10 58 a 2 24 p 12 93 a 13 44 Ly. Greensboro. Gaffneys.... Spartanburg. Greenville.... "Gainesville... 4 08 a 3 18 p 7 38 p 8 08 p Ar. Atlanta, E. T. 6 10 a 4 55 p 10 00 p 4 Atlanta, C. T. 5 10 a 8 55 p 9 00 p 7 17 a 6 25 p 2 30 a 9 25 a 8 40 p 5 45 a Birmingham. 11 20 a 10 10 p Ar. New Orleans 8 80 p 7 45 a

No 11. No. 17. STATIONS. Lv., Savannah .. Ar Lv. Augusta Ar 8 55 a ... " Columbia 1 05 a ... " Newberry 1 25 p 7 40 a " Greenwood. 2 12 p 8 00 a " Hodges ... " Abbeville / 1 85 p Lv Abbeville Ar 8 10 p 8 55 a Lv Belton Ar 6 45 p

Imbia and Charleston.

Trains leave Spartanburg via S. U. & C. division daily for Glendale, Johesville, Union and Columbia and intermediate points 11:45 a. m. and 6:15 p. m.

Trains leave Toccoa, Ga., for Elberton, Ga., daily except Sunday, 7:00 a. m. and 8:40 p. m. Returning leave Elberton, daily except Sunday, 7:00 a. m. and 1:30 p. m. Returning leave Elberton, daily except Sunday, 7:00 a. m. and 1:30 p. m. making connection at Toccoa with trains between Atlants, Greenville and the East.

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uio	In ence		THEOUNI		
		1000	i ii bo c iii	No. 403.	No. 4
Lv	New Yor	rk, Pen	nIR.R.	11.00am	9 00pm
P	hiladelp	hia		1 12pm	12 05am
$^{\rm B}$	altimore			. 3 15pm	2 50am
W	ashingt	on		4.40pm	4 30am
				. 9 00pm	
N	orfolk v	ia S. A	. I	*8 30pm	*9.05am
P	ortsmou	th	100	. 8 45pm	9.20am
V	Veldon			'11 10pm'	11 50am
Ar	Henders	on		*12 57am	*1 50pm
Ar	Durhan	i via S	A L	. +7 32am	†4 16pm
Lv	Durham			†7 00pm	10 19am
Ar	Raleigh	via S	11	.*:: 16am	*3 34pm
S	anford .			. 3 33am	5.05pm
8	o Pines			. 4 23am	5 58pm
1	lamlet .			. 5 97am	6 53pm
V	Vadesbo	го		. 5 53am	8 10pm
A	lonroe .			. 6 43am	9 12 pm
Ar	Wilmin	gton			*12 05pm
C	harlotte	via S.	A. L	* 7.50am	*10 25pm
C	hester v	iaSAI		*8 08am	10 56pm
				R	
				*9 45am	
G	reenwo	od		.10 35am	1 07a n
					1 35am
Ŀ	Elberton			.12 07pm	2 41am
					3 43am
Ar	Winder			. 1,56pn	n 4 29am
Ar	Atlanta	(centr	al time	2 50pn	1 5 20am
		NOB	THEOUN		
				No. 402.	No. 38
Lv	Atlanta	cent.	t. S.A.L.	. *12 00ni	1*7 50pm
Lv	Winder			. 2 40pm	10 40pm
LV	Athens			. 3 16pu	11 19pm

Ar Columbia C N & L R R.....*7 45am Lv Chester, S. A. L....... *7 53pm 4 25am Ar Charlotte via S A L....*10 25pm *7 50am v Monroe S A L..... 9 40pm 6 05am Ar Portsmouth, S. A. E. ... 7 25am 5 20pm Norfolk *7 35am *5 35pm Daily. †Daily Ex. Sunday.

Daily. †Daily Ex. Sunday.

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"Carrier 3 00 p

"Greenville 3 00 p

"Glenn Springs 4 50 p

"Gspartanburg 3 10 p

"Saluda 5 38 p

"Hendersonville 6 03 p

"Asheville 7 00 p

Ly Ashevillé 8 20 a 6410 p Asheville 8 20 a "| Hendersonville 9 1748 a "| Hendersonville 9 24 a a "| Saluda 9 45 a a Green 10 20 a a Trons 10 20 a 4 00% Grenwood..... Ly Calhoun Falls v Augusta.... Ar Allendaie... Beaufort .. Port Royal... Savanuah Charleston... Yemassee Fairfax.....

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