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## PAPERS.

Progressive Farmer, State Organ, Raleigh, N. C.  
Caucasian, Raleigh, N. C.  
Mercury, Hickory, N. C.  
Battler, Whitakers, N. C.  
Our Home, Beaver Dam, N. C.  
The Populist, Lumberton, N. C.  
The People's Paper, Charlotte, N. C.  
The Vestibule, Concord, N. C.  
The Flow-Boy, Wadesboro, N. C.  
Carolina Watchman, Salisbury, N. C.

Each of the above-named papers are requested to keep the list standing on the first page and add others, provided they are duly elected. Any paper failing to do so will be dropped from the list promptly. Our people can now see what papers are published in their interest.

## AGRICULTURE.

The cost of producing a ton of hay is reckoned by correspondents of the Maine Board of Agriculture at \$6.37 when hay is grown in rotation with other crops. When grown as an exclusive crop the estimate is \$5.16.

Some farmers should hang up the following motto in their dining rooms and live accordingly: "More fresh vegetables and less salt meat."

Have a place for each tool, but don't have too many places. A minute spent in putting the hammer in its place may save hunting for it an hour when you are in a hurry.

Very few farmers, says a writer, nowadays raise the fine crops of pumpkins that find a place so naturally in the fields of corn. All that is needed to be done is to plant them; they will do the rest.

Fine, fat hogs are selling at 3 cents per pound in Chicago, Kansas City, Omaha and other Western markets. Guess some of those fool goldbug farmers enjoy it, however, so we will not make any comments.

The Post, of Houston, Texas, says that the sale of oleomargarine in that city is hardly one fifth what it was one year ago. The paper attributes this decline, in the main, to the hostile legislation which has been had in so many States.

From the fourth week on the young pigs need care on their own account, as they want other food than that from their dams, and, as this is the most important and profitable period of their lives, the attention given should not be hindered nor slackened; and yet the temptation is to bestow the more care to the older hogs.

We have good reason to believe that melon, berry, grape growers and truckers generally, are being fleeced by Northern commission merchants. They frequently make outrageous returns. It is easy to claim that the markets are glutted, or that the articles shipped were damaged. We have no feasible remedy to offer, but think truck growers should begin to take steps to protect themselves.

## TO PREVENT THE DEPREDATIONS OF CROWS.

Correspondence of the Progressive Farmer.

Drive up any convenient number of stakes about 6 feet high on opposite sides of the patch. Then make strings by placing two or three white cotton threads together. Then pass the strings from the various stakes and fasten them to the stakes. The strings when placed should be over the vines. The strings need not cross a patch of ordinary size more than three or four times. Simple as this plan is, the crows will immediately after cease to visit the patch, even where they have been depredating.

It is a great temptation to cut some grass to feed either green or partly dried to the horses that have to work hard every day on the farm. It should be resisted, for grass will surely induce derangement in the digestive organs, which will make the horses too weak to do effective work. After the plowing is finished many farmers think the hardest work is over, but a horse cultivating all day will need good dry hay and grain no less than when plowing. The step is quicker in cultivating than in plowing, and requires quite as much muscular exertion to keep at it all day.

## POTATO TOPS INDICATING THE CROP.

It is not a difficult matter for anyone skilled in potato growing to guess the outcome of the crop at a very early stage of growth by the appearance of the tops. If they are not more than three or four in number, and of vigorous growth at the start, the crop, barring disease, will be a large one. If there is a great mass of thin, weak sprouts, there will be a good many small potatoes, but few of marketable size, because each set of roots will have its tubers, and there is not room for all to attain normal growth, says the American Cultivator.

There are more failures of crop from planting whole potatoes if the latter are in good condition than from any other one cause. It generally happens, however, that those who plant whole potatoes have them in warm cellars, where the first white sprouts have so sapped the vitality of potatoes that when planted only two or three of the eyes will grow. We venture the assertion that with potatoes kept in pits during the winter, or in any other way where the eyes will not be pushed into growth prematurely, no crop of large marketable potatoes can be grown from whole seed. This is shown in the uniform failure of potatoes self planted, or left in the ground through the winter to produce a paying crop. They are the earliest potatoes to start into growth, and though every effort is usually made to cultivate them thoroughly, we never knew a case where these self planted potatoes amounted to anything. There were always too many stalks, and by the time the tubers were formed the plants crowded each other so that a crop of marketable potatoes was not possible.

It is not too late after potatoes come up to go through the rows and thin out the weakest shoots in hills that contain more than two or three. It requires some skill to do this, first stepping on the hill and pressing the potato set firmly in its place, while the stalk is seized and with a quick jerk pulled from it. This requires some work, but it is better than letting too many stalks grow up to crowd each other. If more than one stalk is to be pulled the pulling should be done separately, else the entire hill may be uprooted.

Whatever injures healthy leaf growth lessens the potato crop, and if after the tubers are formed the leaf is injured, the quality of the potato is affected. Where the foliage is eaten by potato larva, the potato will be watery and immature. When blight strikes the leaves, the quality of potatoes is affected in the same way. Fortunately poisoning for the potato larva and spraying with Bordeaux mixture to prevent blight have lessened these dangers, and made it possible to secure potatoes of good quality without regard to the season. There is, we think, an improvement in quality of potatoes within a few years, as the market is mainly supplied by those who have had experience and know how to produce the best. It was once supposed that only the small yielders among potatoes were best for the table. The large, coarse varieties were reckoned, as indeed they were, coarse and unpalatable, fit only for stock feeding. But some of the new large potatoes, especially the seedlings of the Rose, are not only enormous yielders, but as white and mealy

as cooked as the old-fashioned one or the newer Snowflake. It is a fact that most of the very great yielders have proportionately large tops, and to the maintenance of due proportion between the top and the root this good quality of the tubers is mainly due.

## NATURAL HUMIDITY OF COTTON SPINNING REGIONS.

A "Report on the Relative Humidity of Southern New England and Other Localities," Bulletin No. 19, of the Weather Bureau, has just been issued, which is a discussion of the subject with special reference to its effect upon cotton spinning. The subject is treated under the following heads: The sources, evaporation and condensation, and distribution of aqueous vapor; observing stations; accuracy of observations; definition of and general remarks on relative humidity; relative humidity of New England group, of New England compared to Mobile, of New England, and Mobile compared with Piedmont Plateau, of northern central New York, extreme monthly, diurnal, and accidental variations of humidity; influence on winds on humidity; individual cases of low relative humidity; comparison of same inside and outside of building; climatic influences affecting manufacture of cotton; climate of Lancashire and India.

The bulletin is illustrated by 9 tables and 3 graphical plates.

The Weather Bureau, recognizing that one of the conditions essential to the greatest degree of success in the spinning and weaving of cotton fabrics is a humid state of the atmosphere, and the more constant the degree of humidity the greater the measure of profitable spinning, instituted a comparison of the "Natural humidity of certain portions of the United States, particularly the South, where the extension of the art is most pronounced, with that of the southern shore of New England."

These investigations show that inside humidity varied greatly from the outside readings, except when the temperatures were nearly the same. In March when the average inside and outside temperatures were respectively 72 degrees and 32 degrees, the relative humidity was 32 per cent. and 61 per cent., respectively; while when mid-summer weather prevailed, and the inside temperature was 83.4 degrees and the outside 84.6 degrees, the relative humidities were 40 and 41 per cent.

"It is apparent that the relative humidity of the atmosphere depends not only on the absolute quantity of vapor present in the air, but also on the temperature which determines the point of saturation."

"The control of both temperature and humidity by artificial means seems to be the final solution of the problem in all cases where the establishment of mills in a relatively dry section is contemplated."

## YEARBOOK OF THE DEPARTMENT OF AGRICULTURE FOR 1895

The Yearbook for 1895 is now ready for distribution. Of the large edition of 500,000 copies, 110,000 copies are allotted to the Senators and 360,000 to the members of the House of Representatives—or over 1,000 copies for each member of the two Houses of Congress, the comparatively small remainder being turned over to the Department of Agriculture for its exchanges and correspondents.

The 656 pages of the Yearbook contain (1) a general report of the operations of the Department; (2) a series of papers prepared in the different bureaus and divisions of the Department or by experts specially engaged, and designed to present in popular form results of investigations in agricultural science or new developments in farm practice. These are illustrated by ten full page plates and 134 text figures; (3) an appendix of 104 pages containing miscellaneous information and agricultural statistics compiled down to the latest available date, relative to the production, values, per capita consumption, exportation and importation of farm products; (4) an index of 30 pages.

For the information of horticulturists, dairymen, and farmers generally, the following table of contents is quoted:

Report of the Secretary: Soil Ferments Important in Agriculture, Origin, Value, and Reclamation of Alkali Lands; Reasons for Cultivating the Soil; Humus in its Relation to Soil Fertility; Forests and Freezes as Affecting Cultivated Plants; The Two Freezes of 1894-95 in Florida and what they Teach; Testing Seeds at Home; Old Pro-

ducing Seeds; Some Additions to the Vegetable Dietary; Hemp Culture; Canadian Field Peas; Irrigation for the Garden and Greenhouse; The Health of Plants in Greenhouses; Principles of Pruning and Care of Wounds in Woody Plants; The Pineapple Industry in the United States; Small Fruit Culture for Market; The Cause and Prevention of Pear Blight; Grass Gardens; Forage Conditions of the Prairie Region; Grasses of Salt Marshes; The Relation of Forests to Farms; Tree Planting in the Western Plains; The Shade-Tree Insect Problem in the Eastern United States; The Principal Insect Enemies of the Grape; Four Common Birds of the Farm and Garden; The Meadow Lark and Baltimore Oriole; Inefficiency of Milk Separators in Removing Bacteria; Butter Substitutes; The Manufacture and Consumption of Cheese; Climate, Soil Characteristics, and Irrigation Methods of California; Cooperative Road Construction; A Pioneer in Agricultural Science; Work of the Department of Agriculture as Illustrated at the Atlantic Exposition.

Besides "Organization of the Department of Agriculture, the appendix contains tabular and statistical matter on the following subjects:

Statistics of the principal crops; Exports of the products of domestic agriculture for the years ended June 30, 1891, to 1895; Surveyors' measure; Imports of agricultural products for the years ended June 30, 1891, to 1895; Total values of exports of domestic merchandise since 1890; Exports of raw cotton from the United States since 1890; Production of certain fruits and nuts, mostly semi-tropical, in the United States in 1889, and the quantities and values imported from 1890 to 1895, inclusive; Statistics of fruit and vegetable canning in the United States; Prices and consumption of sugar; Tea, coffee, wine, etc.; Freight rates in effect January 1, 1892, to 1896 in cents per 100 pounds; Freight rates on wheat from New York to Liverpool; Freight rates (all rail) on live stock and dressed meats from Chicago to New York; The weather in 1895; The Weather Bureau and its voluntary observers; Texture of some typical soils; Educational institutions in the United States having courses in agriculture; Agricultural experiment stations in the United States, their location, directors, and principal lines of work; Feeding stuffs (for animals); Fertilizing constituents of feeding stuffs and farm products; Fertilizing constituents contained in a crop of cotton yielding 300 pounds of lint per acre; Analyses of fertilizers; Barnyard manure; Cuts of meat; Human foods; Methods of controlling injurious insects; Preparation and use of insecticides; Treatment of fungous diseases of plants; Formulas for fungicides; Erroneous ideas concerning hawks and owls; Timber—lumber—wood; Two hundred weeds; how to know them and how to kill them; Distance table for tree planting; Irrigation; Number, weight, cost of seeds, and amount to sow per acre; The metric system; Notes regarding Department publications.

A majority of our farmers work too much in proportion to the amount of thinking they do. Head work is half of the battle of life.

## WEEKLY WEATHER CROP BULLETIN

For the Week Ending Saturday, June 20, 1896.

## CENTRAL OFFICE, Raleigh, N. C.

The reports of correspondents of the Weekly Crop Bulletin, issued by the North Carolina Station, for the week ending Saturday, June 20th, 1896, indicate again generally favorable conditions except over limited areas in the northern portion of the Eastern district and a few central counties, where crops are suffering from too much rain. The temperature was below the normal the first three days of the week, and reached normal or slightly above the latter part. Rains were frequent and beneficial where not excessive. Much damage occurred by hail in four counties. The amount of sunshine was deficient. A few days of dry and warm weather are now needed, in order to enable farmers to cultivate crops, which are becoming very grassy in many localities.

EASTERN DISTRICT.—Too much rain occurred again this week in the northern counties from Halifax east to Currituck, where crops have been damaged, are deep in grass, and farmers have little chance to cultivate them. This is the only section where the condition of crops is not generally favorable

Rain is somewhat needed in portions of Pender, Craven and Columbus counties. Some local damage by hail storms occurred on the night of the 13th in Nash and Wilson, and on the 18th in Putnam county. Except the first three days, which were too cool, the weather was favorable, with showers here and there on almost every day of the week. Corn is growing well; much has been laid by; chinch bugs doing but little damage in this section. Cotton has improved, except in the north, and is blooming in many places; there is much complaint of lice. Tobacco is being topped and some farmers expect to begin curing in two weeks. Sweet potatoes doing well; Irish potatoes nearly all shipped; watermelons growing nicely.

CENTRAL DISTRICT.—Showery weather interfered considerably this week with cultivation of crops, harvesting and cutting hay, and in consequence over considerable portions of the district farm work is behind and crops in grass, while in many other counties where the rain-fall was less crops are clean and well worked. On the whole the weather was favorable, except some heavy washing rains and damage over limited areas by hail on the night of the 13th in Wake (near Wake Forest) and in Randolph (near Soapstone Mount). Cotton is all right, except in a few places on light lands, where it is red and poor; much complaint of lice; cotton is blooming in south. Corn generally very fine, but considerable damage by chinch bugs. Housing wheat and some thrashing going on. Oats being cut and peas planted on stubble land. Large crop of sweet potatoes, and looking very fine. Sorghum good; vegetables plentiful; blackberries ripe; watermelons will soon be ripe; other fruit poor.

WESTERN DISTRICT.—Generally cool and cloudy weather, with frequent rains, prevailed this week; the rain fall was excessive in only one or two counties (Buncombe and McDowell), where lands were washed and grass and weeds are growing rapidly; but in spite of these drawbacks crops made rapid growth during the week, and the general outlook continues good. Winter oats out, and though short, are not altogether a failure, as many report them good now. Wheat nearly housed, except in north and west, where cutting is going on; thrashing is progressing slowly. Corn made a fine growth, and is being laid by; corn planted in March now in silk and tassel; chinch bugs doing some damage. Nights have been still too cool for cotton, and lice are checking growth, but crop fine, nevertheless. Many cabbage plants were transplanted in the west this week. Meadows are now fine.

It used to be the rule to keep horses from drinking at noon or night after they had been working through the forenoon or afternoon, until they had eaten their feed and had cooled down. This was considered necessary in order to prevent injury from taking cold water while the system is heated. But this is cruel to the horses, as they can not eat what they should if they are parched with thirst. The better way is to give each horse in the middle of the forenoon a pail of water into which a small quantity of oatmeal has been stirred. This will refresh and invigorate the horse without doing any injury, and will prevent him from being injured by drinking freely at noon.

## CAN'T READ HIM OUT.

Correspondence of The Progressive Farmer.

It seems to me that a number of our Populist friends are trying to read G. Ed. Kestler out of the People's party. This is all wrong, Mr. Kestler has a right to his opinions and to express them through the columns of the press if he wants to. He uses language that some of us cannot commend, but we must remember that none of us are as careful in our expressions as we should be. If we cannot endorse his ideas or his argument let us refute them or answer them with arguments and not resort to ridicule. Mr. Kestler will vote the Populist ticket fusion or no fusion, and no amount of ridicule will drive him from us.

Very respectfully,  
R. E. TISSAL.

Wake Forest, N. C.

[We hardly think there is any effort or desire to read Bro. Kestler out of his party, but he may read himself out, if he isn't careful.—Ed.]

## HORTICULTURE

### COMPARATIVE TEST OF OVER ONE HUNDRED VARIETIES OF STRAWBERRIES.

Correspondence of the Progressive Farmer.

I give below as clearly and candidly as I know how not only the result of this year's test, but of many years' experience as a strawberry specialist.

### EXTREMELY EARLY VARIETIES

Meeks Early.—Very firm, perfect color, good size, profitable on rich soil. Improved Westbrook.—Its productiveness, firmness, perfect color and good size make it a highly profitable market berry. But soil must be rich. Murray.—A better market berry than Westbrook under average culture. Several days later.

Huffman.—Not productive enough this far north to pay.

Eleanor.—Very promising, but fully tested here.

### EARLY VARIETIES.

Smeltzer.—Similar to Michel, but larger and more productive. Pays well here.

Michel.—Profitable as this is in the West and Southwest, it does not pay here.

Arkansas Traveler.—An exceedingly heavy bearer of large berries.

Clyde.—Productive of large berries, which excel in firmness.

Rio, Dayton, Van Demon.—Fine berries, all of them, but not productive enough to pay.

Newman.—This standard Southern berry does not pay this far north.

Beder Wood.—Moderately prolific, but rather soft.

### MEDIUM EARLY VARIETIES.

Bubach.—Its huge size and unfailing productiveness make it our great market berry.

Greenville.—Similar to Bubach.

Bismarck.—Promises to be an excellent pollinizer for Bubach, as it resembles it closely in plant and berry.

Crawford, Beecher, Mary, Enormous, Marshall.—These varieties are good only on very rich soil.

Gandy Belle, Tennessee Prolific, Woolverton.—These varieties are of the very highest value as pollinizers for Bubach, Greenville and other large pistillates.

Wm. Belt.—A superb grower, not fully tested as to fruit.

Brandywine.—In flavor, color, size productiveness and shipping qualities about perfect.

Belle.—Rusts some, but bears good crop of huge, flat, misshapen berries. Barton, Crescent, Haverland, Great Prolific, Phillips, Love Princess, Saunders, Bissell, Splendid, Muskum, Haverland, Edgar Queen.—These all bear good crops and are safe average market varieties.

Cumberland, Parker Earle.—These varieties have a fatal weakness. They are too soft to carry to market.

Columbian, Cloud.—These varieties do not pay this far north.

Cyclope.—Prolific of firm berries, but not large enough.

Lanah.—This variety, which has created a great stir South, will not pay here.

Enhance.—A powerful pollinizer. Berries large but rough.

Wainfield.—That great standard of the West and Northwest ranks far below Crescent here.

Ivenhoe.—A firm, large, well colored, productive market berry.

B-unette, Banquet.—Claimed to be of perfect flavor, but I have never been able to find enough fruit to get the taste well in my mouth.

West Lawn.—This ranks with my largest and most valuable market berries.

Smith's Seedling.—A good average berry, but not at all extraordinary.

Shuckless.—Too soft to ship.

Shusters Gem.—Exceedingly prolific of berries of the Crescent type. I know no heavier bearer.

Louise.—A good, productive, average sized staminate.

Lady Thompson.—Ripens among the first medium early varieties. Bears here a heavy crop of large, well colored berries.

### LATE VARIETIES.

Gandy.—A superb berry, but not prolific except under very high culture.

Aroma.—Equal to Gandy in size and far more productive under average conditions.

Equinox.—The latest of all. Prolific, of fair size, but of poor flavor.

Timbrell.—A well flavored table berry, but fails to color well.

The following varieties I have discarded: some of them as worthless; some of them as inferior to varieties of similar character: Acme, May King, Ontario, Pearl, Regina, Stevens, Accomac, Beebe, Belmont, Bomba, Capt. Jack, Dew, Gillespie, Hartfield, Beverly, Lida, Manchester, Monmouth, Oregon, Everbearing, Cameronian, Pineapple, Southard, Sterling, Alabama, Bessie, Clark's Early, or Early Idaho, California, Crystal City, or Hyslop, Jos. Jersey Queen, Mammoth, Old Ironclad, Price, Felton, Pansy, Stayman, Yale, Gypsy, Levian, than, Kentucky.

O. W. BLACKNALL.

Kittrell, N. C.