The Middle South WOOL BOOK

A Treasure of Practical Information for the Home *and* Farm

Presented by the
LEAKSVILLE WOOLEN
MILLS, Leaksville
N. C.

Edition of

1900

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The Middle South WOOL BOOK

A TREATISE OF PRACTI-
CAL INFORMATION FOR
THE HOME AND THE FARM

By Frank H. Taylor

LEAKSVILLE WOOLEN MILLS
LEAKSVILLE, N. C. EDITION OF 1900

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OUR GIFT TO THE WOOL GROWERS

THE Leaksville Woolen Mills enjoys a wide and favorable reputation all through the great wool-growing belt of North Carolina and adjoining States. Its methods of conducting business have proven, by long experience, to be of equal benefit to both the wool growers and the company. The primary feature of the business of this company is a fair interchange of goods,—a system based upon the good old institution of barter.

Barter is as old as humanity. It was in vogue centuries before money was invented, money being, in fact, but an artificial convenience for the expansion of an exchange of commodities. Barter remains to-day the most equitable way of trading in many parts of the world.

Thousands of farmers, many of them hundreds of miles distant from Leaksville, deal with us annually. We naturally wish to establish closer relations of confidence and good-will with these patrons, to encourage them in the profitable field of wool-growing, and to make the name of the Leaksville woolen mills a household word.

To this end we have published, at a large outlay, the *WOOL BOOK OF THE MIDDLE SOUTH*. It will be found, upon examination, of great practical value in every home. It not only deals with the important subjects of wool and its improved production, but it contains a great variety of facts which everyone should know—facts bearing upon the conditions of daily life upon the farm. It is intended as a helper, an authority and a friend in time of need. It should be treasured as one of the most valued books in the house and always kept in sight where it can be instantly found when wanted.

The *WOOL BOOK OF THE MIDDLE SOUTH* is not sold. It is published only for those who deal with this company under conditions elsewhere stated.

If it happily serves its purpose of keeping this company and its business offers constantly before those who receive it, the care, labor and cost of producing it will have been well expended.

Very respectfully
THE LEAKSVILLE WOOLEN MILLS.
LEAKSVILLE, N. C.

May 1st, 1900.

We manufacture your wool upon the cash or toll plan at any time during the year into any of the following articles. We pay freight upon wool sent to the mills to be manufactured. : : : : : : : : :

BLANKETS
CARPETS
ART SQUARES
CHEVIOTS
JEANS
TAILOR-MADE
DRESS SKIRTS
FANCY BED-
SPREADS '
RUGS
CASSIMERES
FLANNELS
UNDERSKIRTS
BABY BLANKETS
BUGGY ROBES
DOUBLE AND
SINGLE YARNS

A COSEY HOME SCENE.

Blankets, Carpet Rug, Coverlet, Baby Blanket and Dress Skirt from the Leaksville Woollen Mills.

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THE LATE EX-GOVERNOR JOHN M, MOREHEAD

Yours Truly
J M Morehead

GOVERNOR JOHN MOTLEY MOREHEAD.

(Portrait on Page 7)

The subject of this brief sketch was born in Pittsylvania County, Va., on the 4th day of July, 1796. At a very early stage of his infancy, his parents, John Morehead, Esquire, and Obedience Motley Morehead, native Virginians, removed to North Carolina, settling upon the waters of the Dan, in Rockingham County. While Virginia shares in the reflected honor from the career of this remarkable man, yet in a peculiar sense was he the son of North Carolina, the State of his adoption and nurture.

Graduating with distinction from the university of his State in 1817, he was two years thereafter licensed, and came to the bar at Rockingham, where he soon obtained a competent practice, and rapidly rose to be master of the first position. As a lawyer, he thoroughly mastered the general principles of law, and his mind was of such a practical cast that he was one of the best counsellors in the State. No client was ever heard to complain of having been misled by his advice. But it was as an advocate that he shone with peculiar splendor. His personal presence was imposing, his face beamed with kindness, and such was his peculiar power in addressing the court and jury that in his long legal career, he never lost a capital case. In 1822, he was elected to represent Rockingham in the Legislature, and soon thereafter removed to Guilford County, where he quickly became the "foremost man of all." In 1827, he represented Guilford in the Legislature, being frequently returned as its honored representative until 1840, when he was placed at the head of the Whig party in the State as its candidate for governor, having for his competitor, the Hon. Romulus M. Saunders, the able champion of the Democratic party. The close of this, perhaps the most memorable political campaign in our annals, resulted in his election by a large majority. He was re-elected governor in 1842, his competitor being Louis D. Henry, a man of rare speaking talents. In these memorable campaigns, he demonstrated his invincible power upon the hustings. Such was his clearness of argument, coupled with a peculiar magnetic force, that he was never defeated for any office, for which he was a candidate.

While in the office of governor, he busied himself with plans for the welfare of the people of the State. The lunatic asylum, at Raleigh, was built in pursuance of a recommendation in one of his messages to the Legislature. The imposing edifices for the comfort of the deaf, dumb and blind were projected by his genius and erected under his supervision. In 1848 Governor Morehead was President of the great Convention in Philadelphia which nominated General Taylor for the Presidency. In office Governor Morehead was eminently firm and patriotic in the discharge of his duties, wielding all his influence for the public good alone, disregarding of the motives of personal ambition. He was a member of the Peace Congress which convened in Washington early in 1861, in the hope of averting civil war. Later, as a member of the Confederate Congress, he displayed such diligence, sagacity and wisdom as to win the highest respect and confidence of President Davis, who tendered him the office of Secretary of the Treasury of the Confederate States, which proffer he declined.

As a statesman he was eminently patriotic and comprehensive. To him more than to any other man is the State indebted for her existing works of internal improvement, her benevolent institutions, and the new impulse that the cause of education received at his hands. He founded Edgeworth Seminary, at Greensboro, N. C., for the education of young ladies, supporting it out of his own means during its long and useful existence.

As a man of affairs, his great practical knowledge and experience led him into many useful enterprises. He was a pioneer in manufacturing in North Carolina, founding the Leaksville Mills in 1837, owning and conducting them with success up to the time of his death, in August, 1866.

While a member of the House of Commons he secured the passage of the charter for the North Carolina Railroad, and at the organization of the company was elected its president. He finished this great work of building the North Carolina Railroad, 223 miles long through the center of the State, turning it over to the State and stockholders, finished and equipped, without a dollar of bonded debt on the company, a feat which was never accomplished before or since in the history of railroad construction. In this more than any other achievement of his remarkable career, he demonstrated the salient feature of his character—great practical vigor.

On retiring from the presidency of the North Carolina Railroad Company, in his farewell address to the stockholders, in July, 1855, he said, in conclusion: "Living, I have spent five years of the best portion of my life in the service of the North Carolina Railroad; dying, my sincerest prayers will be offered up for its prosperity and its success; dead, I wish to be buried alongside of it in the bosom of my own beloved Carolina!" This wish was realized.

North Carolina owes him a large debt of gratitude for what he did for her, as well when he was in the private walks of life as when charged with the duties of high official station.

As an individual Governor Morehead was a man of principle, prudent in his habits, was a strict economist of time and means. He was temperate in all things, and his moral habits were eminently pure and elevated. No profane language ever issued from his reverential spirit. He was social and genial in temper, bland and dignified in his manners. A native of Virginia, it was upon her sacred soil the last scene of his eventful life transpired. He died at Rockbridge Alum Springs, in August, 1866, in the seventieth year of his age, exercising to the last a profound belief in the "divinity that shapes our ends." He was laid to rest "in the bosom of his own beloved Carolina," amid his monuments of renown, that perpetuate his genius and worth, and which ever stimulate a devoted patriotism and lofty State pride.

JOHN M. MOREHEAD
Treasurer Leaksville Woolen Mills Co.

THE LEAKSVILLE MILLS

Sixty-three years ago Gov. Jno. M. Morehead established the Leaksville Mills, and for more than three-score years they have served their patrons and friends, spinning and weaving their cotton, carding their wool into rolls, grinding their corn and wheat, pressing the oil from their flax-seed, sawing their timber, and converting their lumber into various forms of finished products. Through this long period they have shared the good and bad fortunes of their friends, and have kept pace with their changing wants, tastes, and requirements. To more effectually do this, since 1881 very large expenditures have been made to establish and complete The Leaksville Woolen Mills. The success resulting from the careful supervision of every detail of this new branch of business has been exceedingly gratifying. Their experience during the past has been that when times are hard, people wear *More Leaksville Cloth*; when times are good *more people* wear Leaksville cloth, and to more promptly meet the wants of the rapidly increasing patrons, further additions are being made to the producing capacity of the Mills.

For two generations the honored name of Morehead has been associated with the manufacturing interests at Leaksville, Jno. M. Morehead, Treasurer of the Leaksville Woolen Mills, being a grandson of Governor Morehead. The President of the Company, a native of North Carolina, has been associated with the institution since its incorporation and was its former Secretary. The present management enter upon this new era of enlargement and increased facilities with the experience of the past added to a determination to maintain the growing popularity of these well-known Mills, by keeping their products well up to their high standard of excellence.

M. J. Tyler, who has been, for a number of years, the general manager of our mills is a native Virginian and has had forty years of experience in the manufacture of wool.

WATERPOWER FROM THE SMITH RIVER, LEAKSVILLE, N. C.

HIRAM FOARD
President Leaksville Woolen Mills Co.

A CHAPTER ON WOOL.

In all ages the sheep has been a prominent representative of rural husbandry, profitable and eminently respectable, from the time Abel, the first keeper of sheep, made to the Lord an acceptable offering of the firstlings of his flock—early lambs; and many hundreds of years later that great farmer and flock-master, Job, reckoned among his stock fourteen thousand sheep. At the present day the subject of sheep husbandry has lost none of its interest, but is still receiving much careful attention.

There are many good reasons why every farmer should keep at least a few sheep. Sheep-breeding is not exhaustive to the soil, but, on the other hand, does much toward preserving its fertility. Few farm animals produce more valuable manure than the sheep. The fact that they destroy weeds and briars which other animals will not touch, should not be overlooked. An accurate account of the returns from even a few sheep will show a fair profit in favor of sheep-breeding—not so much as a specialty, but as an assistant to other farm animals and crops.

This branch of the farmer's business, like all the others, returns the greater profit in proportion to the amount of careful and intelligent consideration which it receives. The trouble with most of the wool grown on our common sheep is that it is too long and hairy, lacking the curl and felting qualities which add so much value to the fibre.

In our markets wool is generally classified as of two kinds: long combing or worsted wool—short, or clothing wool. These wools are very different in their nature, and are raised for distinctive and very different modes of manufacture. The long wools, bred with as little felting qualities as possible, are worked on combing machinery, and are converted into worsted fabrics. They are not suited for making rolls, yarns, jeans, cassimeres, flannels, nor blankets. The short wools are curly, and their felting qualities render them well adapted for making just what the farmer needs.

The introduction of the Cotswold buck, or other breeds of like character, to cross with our already too long and hairy wool, is a step in the wrong direction. On account of the large carcass of the Cotswold, it has been regarded with favor by some; but this is but an apparent advantage. The distribution of fat and lean in its carcass is of such proportions as to render it unable to compete as a mutton sheep with smaller bodied, leaner kind.

Experience has demonstrated beyond doubt that the best sheep to cross with our common stock is the Merino. The wool is at once reduced in length and has improved felting qualities. Not only does the Merino stamp his peculiarity of fleece upon the offspring, but the quality of the mutton is alike improved. We do not wish to be understood as advocating raising pure-blood Merinos. This would be a step toward the opposite extreme. Most of the machinery in this country is not adapted to working pure Merino wool. The wool best suited to the needs of the farmer, and which brings the most uniform price in the market, is not the fine, nor the coarse—but the middle grade. A cross between the Merino and our common stock gives a middle grade. There are also many pure-blood breeds of the middle grade, any of which are preferable, as a pure-blood flock, to the Merino. Of these we mention the South-downs, Oxfords, Shropshires, and Hampshires. Experience seems to

GROUP OF PURE DELAINE MERINOS.

point to the Southdown as the best "all round" sheep we have. It is a hardy little animal, with a tight fleece, which enables it to live out of doors the year round, and with a constitution which enables it to keep fat on next to nothing. As a mutton sheep it is unexcelled. Its fleece classes among the middle grades—not too fine nor too coarse. Pure-blood Southdown wool makes nice, smooth, yarn, having good felting qualities, plenty of elasticity, and lasts well.

THE SHROPSHIRE.

This is an English breed of sheep that has taken kindly to its new home, and is also a valuable product of both wool and mutton. The Shropshire is the product of cross-breeding the sheep of that shire or county with the oldest improved breeds, the Southdowns and Leicester. The union of these improved breeds resulted in the formation of a new breed partaking of the characteristics of each; thus the Shropshire has the size of the Leicester, the form of the Southdown, and the fleece is a combination of both, slightly coarser than that of the Southdown, and shorter than the Leicester. The fleece also carries more oil than the Southdown. The flesh of the Shropshire is dense, and its mutton is regarded as second only to the Southdown. They are also exceedingly

THE SHROPSHIRE.

prolific, and handle their young better than any large breed of sheep. They are also hardy and well adapted to endure a wet climate. Rams of this breed can be used to advantage in crossing inferior classes of sheep.

The character of the wool in many flocks of common sheep could

be much improved, even without the introduction of any pure-blood into them, by killing out the bucks whose fleeces are of a peculiarly long and hairy nature. That "black sheep," which is found in every flock, comes handy also for the table, as the fleece is always of an inferior nature. When the time arrives to part with a sheep or lamb, and you have a black one in the flock, select him, leaving his more fortunate associates upon whom nature has not stamped the imprint of inferiority. We receive large quantities of wool every year which could be much enhanced in value by following the above suggestions. These results could be easily accomplished with very little expense. The cost of feeding a sheep yielding a long, coarse and hairy fleece is the same as one growing a fleece far more valuable; therefore, the wisdom of producing the more valuable fleece is apparent.

The next in importance to raising a curly fleece is to wash it properly.

WASHING WOOL.

The life of curly wool is its elasticity. Destroy this, and its wearing qualities are at once irreparably impaired. There are two things which, when given in two large doses, robs it of its elasticity, leaving it lifeless. These are heat and alkali.

Wool should not be washed in water hotter than 120° or 140° Fahrenheit—in no case hotter than the hand can bear. One hundred and thirty degrees F., or comfortably warm to the hand, is a safe rule. Soap, with much lye in it, should never be used; the lye eats the life without cutting the grease. During the process of washing, it is well to take a handful, now and then, and rinse thoroughly. If the wool feels springy when pressed with the hand, it is then ready to be rinsed thoroughly in cold water. Cold water is far better for this operation than warm. Wool improperly washed can never be made as white as it should be. The grease left in it becomes "set," so that it is impossible to thoroughly remove it without injury to the fibre. Wool can be washed with more ease and thoroughness immediately after shearing than if allowed to remain till the fleece becomes dry.

SHEARING.

When parties do not intend to wash their wool, but ship it as it comes from the sheep's back, we would remind them of an important fact that should not be overlooked. Wool sheared with the dew on it should be exposed to the air till it is dried off. To pack it away in bags, or a close place, with the dew or any dampness on it, is very injurious to the fibre if left for any length of time in this connection. A process of moulding sets in, giving the wool a musty smell and yellow appearance. To further avoid this result, it is better to store unwashed wool in a dry place.

The most improved plan of shearing is to house the flock the night before shearing, if they are to be sheared very early in the morning, and the wool is not to be washed immediately. As soon as a sheep is shorn, clip off the tags from the fleece and roll it up with the skin side out. Wrap the tail end around the roll, or tie a string around it. This keeps the wool from drying out so much, preserves its softness, and makes subsequent washing more easily done.

GROUP OF PURE BRED SOUTHDOWNS.

BURRS.

While we have the very latest and most improved machinery for removing burrs, there has never yet been invented one that will remove them from wool without more or less injury to it and loss of fibre. The human hand alone can remove them without particles of wool still adhering to them, and this gentle process alone preserve the fibre from injury. But the slowness of hand-picking renders it so expensive that it is far more economical to keep the sheep from coming in contact with burrs. "Evil communications" with no more certainty "corrupt good manners" than contact with burrs taints the life and character of a valuable fleece of wool.

CONCLUSION.

The limits of this pamphlet are too brief to enter into many other points of value connected with this interesting subject. Experience has demonstrated the suggestions herein as worthy of attention, and to overlook them tends, more or less, to deteriorate a valuable fibre for which nature has done so much, but which oftentimes receives very rough treatment from the hands of artificial practice.

ADVANTAGES OF SHEEP.

1. They are profitable.
2. They weaken the soil least, and strengthen it most.
3. They are enemies of weeds.
4. The care they need is required when other farm operations are slack.
5. The amount of investment need not be large.
6. They are the quietest and easiest handled of all farm stock.
7. The returns are quick and many.
8. Other farm products are made more largely from cash grains, while those from the sheep are made practically from pasture.
9. There is no other product from the farm that has fluctuated so lightly in value as good mutton.
10. By comparison wool costs nothing, for do not the horse and cow, in shedding their coats, waste what the sheep save?
11. A good flock of sheep is the best helper, not only in filling the purse, but in keeping up the condition of the land without really any extra expense, that is within reach of the husbandman. One thing should therefore be remembered by farmers who have suitable land at their command: that they make a very great mistake, and submit to annual loss, of more importance than they imagine, in the absence of a good flock of improved sheep browsing upon their hills.
12. The last, but by no means the least, advantage is having a medium of exchange, with which to procure any of the numerous and varied products of the Leaksville Woolen Mills at the least possible cost.

HOW TO SHIP WOOL.

When it is not convenient to ship wool through one of our agents, you can ship it direct to us. We, however, receive so many packages not properly marked, thus causing delay in returning goods, that we add below a few important details which, if carefully followed, will insure a speedy return of goods:

1. Don't ship wool by express.
2. Don't put instructions inside of a bag.
3. Don't mark it with a swinging tag.
4. Don't send a single bag without your name in full marked on it. Ship wool by freight, and we will pay the same to the mills on all packages exceeding ten pounds. If sent by express we charge you with it.

Mark your full name on every bag; initials will not answer. When possible it is best to mark your name on each bag with a brush and marking-pot. If this cannot be done, the next best way is to write your full name on pieces of white cloth, and sew the cloth on every bag.

Swinging tags so often get torn off in transportation, hence should be avoided, if possible.

Write us by mail the number of bags sent, weights, and how you wish it manufactured. Also state whether the wool is to be worked on shares or for cash. We never work wool on shares unless ordered to do so.

If above directions are followed, and the wool is marked to "Leaksville Woolen Mills, Leaksville, N. C.," we will be responsible for safe delivery of wool and goods.

DESPAIR AT THE LEAKSVILLE WOOLEN MILLS

“Hello! What’s wrong?”

“Plenty of it. Here are some bags without the owner’s name. Now how in the world are we going to find out who sent ’em?”

“That’s so, and it wont be long before the shipper will be raring ’round and swearing that he’s been cheated out of his wool.”

JOY AT THE LEAKSVILLE WOOLEN MILLS

"That's the way to direct a bag of wool. What does he say in his letter?"

"He says: 'Dear Sirs: I send you five bags of wool, weighing 150 pounds; make up as follows, etc.'"

"Hurrah for John Smith! he understands his business."

AGRICULTURAL NOTES.

For the following suggestions upon agriculture and fruit raising we are mainly indebted to Mr. W. F. Massey, of the North Carolina Experiment Station. He is an eminently practical man, and has done much to inaugurate, by precept and example, improved and up to date methods of farming.

COW PEAS.

The advantages of the crop may be thus briefly stated:

1. It is a nitrogen gatherer.
2. It shades the soil in summer, keeping it in a condition the most suitable to the most rapid nitrification, and leaves it friable and loose, in the best condition for a future crop.
3. It has a large root development, and hence pumps up from great depths and large areas the water, and with it the mineral matter needed by the plant.
4. Its adaptability to all kinds of soils—stiffest clays to most porous sands; fertile alluvial bottoms to barren uplands.
5. It stands the heat and sunshine of southern summers.
6. Its rapid growth enables the farmer in the South to grow two crops a year on the same soil.
7. If sown thickly it will by its rapid growth and shade effectually smother all weeds, and thus serve as a cleansing crop.
8. It is the best preparatory crop known to the Southern farmer. Every kind of crop grows well after it.
9. It furnishes a most excellent food in large quantities for both man and animals. If used regularly in a short system of rotation the soils of the South would soon rival, in fertility, their primitive condition.

The average quantity of nitrogen alone found in an acre of peas in experiments made in six Southern States is 122 pounds per acre.

This doubtless came almost entirely from the air, and at the average value paid by farmers for nitrogen in commercial fertilizers would be worth alone over \$18 per acre. In addition to this there is the phosphoric acid and potash made available as plant food, and largely brought from depths beyond the range of other crops. The best varieties for vines and green manuring are the Unknown, Black, Clay, Red; while the strictly bunch varieties, Whippoorwill, Black-Eye, Blue, etc., give larger returns in peas. As to the Unknown, we would, however, say that it is not yet sufficiently acclimated to make its best growth north of the James River, in Virginia.

Cow peas and pea-vine hay have a very high feeding value, being rich in flesh and fat-forming matter, whilst the vines, when made into silage, have been proved to be palatable and nutritious food for stock. The proper disposition to make of pea vines is to convert them into hay or silage and feed to stock, carefully returning the manure to the soil. In the absence of stock the vines should be turned under in the fall and the land be seeded to crimson clover, wheat, rye, or oats. If the land be too poor to bring peas without help, give it 200 or 300 pounds to the acre of acid phosphate and kainit in equal parts, and it will make a crop. Sow cow peas on all land not planted to some other crop, and

sow them in the corn-field when laying by the crop. In no other way can poor land be so cheaply and permanently improved or the fertility of good land be preserved.

PLOUGHING UNDER.

On a dead, poor soil it may pay to plow under a mature crop, but beware how you plow under a green crop in the South. Ordinarily the value of the vines for hay is far greater than their manurial value, since they are the best possible cut hay. Do not cut them till the pods are well filled. The vines are then at their best. But do not let any ripen before you cut, or you will have their leaves dropping.

CURING THE VINES.

There has long been a notion that the cow pea is a very hard crop to save in the form of hay. This is erroneous. The whole method is simply to cut the peas, leaving them as cut without raking into windrows or cocks, and when they are dried enough so that a bunch twisted hard in the hands shows no sap running to the twist, they will do to go in the barn. The barn should be tight, and the peas should not be disturbed while heating. They will get very hot, and if the hay is moved with the idea of cooling, all will be spoiled. The packing in layers with fodder is not a bad plan, but is not necessary, and salt is not only unnecessary, but harmful to any hay. Let it severely alone in a close barn and it will cure perfectly, even though it gets hot enough to burn your feet. "Care must be taken, however, that there is no dew or other external moisture on them when stored." The important thing is to store them while still limp (with no external moisture on them), so that the leaves are saved, for these are the best part of the hay, and are commonly lost in the usual mode of drying completely outside.

Having this valuable forage at hand, and the corn fodder to balance the ration, we should be able to feed stock in the best manner. The black and the clay are good for all purposes, and can be sown from June to August.

STOCK FEEDING THE GREAT NEED OF THE SOUTH.

One may say, "If peas are of such value in renovating the soil, why not turn them under without cutting?" The plowing under of a mass of green vegetation in a warm climate, and especially on a sandy soil, is apt to result in the evolution of organic acid to such an extent as at times to render the land so treated for a time wholly unproductive. But the most important point is that we thus bury a crop worth usually \$20 per acre as food for stock. The best way is to cure the peas as hay, feed them to stock and save all the manure carefully to be returned to the soil. The slavish dependence of the Southern farmer on the fertilizer manufacturer has been largely brought about by the failure to make the feeding of stock an important part of our work. Stock feeding and the saving of manure lie at the foundation of all successful agriculture. Organic matter and plant food in the form of barnyard and stable manure have never been fully imitated in chemical matters alone. There are few localities where less cropping and more cattle raising would not yield greater returns.

The Essentials of Successful Agriculture in the South

CARE OF HOME-MADE MANURE.

Raise more pea vine hay and feed it to cows in winter instead of starving them on shucks and straw, and thus improve the value of your manure, to say nothing of the improvement of the animal so fed. But it is not enough to make rich manure by good feeding. It must be handled so as to preserve its value, for the nitrogen in the manure leaves us very rapidly under certain conditions. If thrown out under the eaves where the rain falls on it, the portion of it most valuable for plants soon washes away. If thrown out in piles it soon heats, and the ammonia flies off into the air, thus losing that which costs 15 cents a pound to get in commercial fertilizer. The best place for manure is on the field where some plant can get the use of it. If you have a crop of crimson clover or rye to be followed in the spring with corn, scatter the manure as made on these crops; both they and the corn following will get the benefit.

The next best way is to let the manure accumulate in the stable, always keeping sufficient bedding to absorb the urine.

PASTURE.

The keeping of live stock necessitates pasture for them in summer, and there is no section in which a permanent pasture cannot be maintained if the proper grasses are used and they are properly treated. In all the upper red clay country the main reliance should be in orchard grass for a permanent pasture. The seeding must be heavy, for the sod should be quickly and thickly made. For the upland section a mixture of orchard grass, red top, and Virginia blue grass is excellent, sown one bushel (14 pounds) per acre. Do not sow any white clover, as it is not desirable where horses are to be pastured, slobbering them too much. Sow in September or October, harrowing in with smoothing harrow. Do not pasture it till late the following summer, and then but little. Best to give the grass a chance to seed, and increase the soil. The grasses named do not succeed so well on the level lands of the East. The Bermuda grass, though hated by the cotton farmer, is the best pasture grass for the East. If care is used it can be kept out of the cotton fields, as it does not make seed here. It is a summer grass only, and needs the mixture of the Texas blue grass to make a winter pasture. While the Bermuda grass should never be allowed in the upper red clay lands where other grasses can be grown, there is no better grass for pasture where it is at home, in the eastern section.

CURING CLOVER HAY.

The chief points to be observed are: (1) Cut as soon after blossoming as the state of the weather in your locality will admit; (2) never let the hay lie exposed to the sun long enough to crisp the leaves, but let the curing be done in the windrow, cock or barn; (3) never haul any in when damp with dew, either in morning or evening; (4) pack tightly in a clean barn, and on no account disturb it while heating.

SECOND-CROP CLOVER.

When not wanted to plow under for wheat, let it decay on the ground. It forms a mulch, thus preventing winter killing, and enriches the ground for future crops.

CRIMSON OR GERMAN CLOVER.

The value of this clover arises not so much as a hay crop, though it makes good hay if cut as soon as it blooms, but for winter pasturage and plowing under in the spring. It is an annual. A stubble field is one of the best places to sow the crimson clover. While it is better to run a harrow over the surface it is not necessary. The seed may be broadcast upon the stubble without preparation. The seed should be sown in August. In standing corn or cotton or some other late cultivated crop is the best place to sow crimson clover, since we have all the conditions for growth in a well prepared soil, and have also the needed shade. Where a red clay land, strong with potash, is kept successively in corn, it would be well to sow crimson clover just as the corn is laid by. This will give good winter pasture if needed, and a good sod to turn under before replanting corn the following spring, thus improving the land and gaining a crop. Many failures in producing good stands of clover are due to the lack of potash in the land. While an average red clay soil is strongly impregnated and tenaciously holds this chemical, yet it can be exhausted, in which event fertilizers containing a large per cent. of potash should be used.

THE APPLE.

There are few sections where the apple cannot be grown in some varieties profitably, at least for home use. Soil exhaustion is the cause of most failures in fruit raising. Trees in the orchard need feeding, for a good crop of apples will remove more mineral matter from the soil than three crops of wheat. The cultivation of the apple is given with some detail, as it is essentially the typical American fruit. The conditions, which, if carefully observed in regard to the selection of varieties, planting and general care to the point of maturity, may be equally applied to the other standard fruits, such as the Peach, Pear, Apricot, Plum, Cherry and Quince.

WHAT AGE TO PLANT TREES.

Buy one year old trees of all kinds of fruit, and head them not over two feet from the ground. At this age they are easier to transplant, and are more apt to live and grow well.

PREPARATION OF THE LAND FOR THE ORCHARD.

The preparation of the land before planting an apple orchard is of the greatest importance, for any lack of preparation before planting can hardly be remedied after the trees are set. The chief point in the preparation of the land is deep plowing of the soil. The land for the orchard should be prepared early in the fall, by plowing as deeply as a pair of horses can pull a plow, and behind this team another team in same furrow, with a subsoil plow to break the clay still deeper, till the whole land is broken to a depth of 15 inches. This deep preparation will be the best investment the planter can make in setting the orchard.

WHEN AND HOW TO PLANT.

In this climate during the fall is the best time to plant. As our soil never freezes deeply in winter, the trees will be renewing their feeding roots during the winter, and will thus be ready to grow off rapidly in the spring.

If the land has been properly plowed and subsoiled, there is no need of making extra large and deep holes. In setting the trees the earth should be rather on the dry side than wet, for it is hard to set a tree in wet soil. The chief point to observe in planting is to get the earth closely packed about the roots. Never put manure in contact with the roots. Good surface soil is all that is needed about the roots, and any manure to be used should be put on top the soil as a mulch. Used in this way the manure is very important in preserving moisture and feeding the tree. It is a good idea to soak the roots in water before planting.

CULTIVATION OF THE APPLE ORCHARD.

During the early years of the life of the orchard the thing most needed is a good healthy growth. To encourage this well developed growth, good cultivation is important. During the time while the trees are small there are some hoed crops that can be well grown in it. Corn is too tall a crop and too long on the ground. Low-growing garden vegetables are far better, especially those that come off the ground in early and mid-summer, for the cultivation of an orchard should cease by the first of July, so that the growth of the season can be properly ripened. At this time the orchard should be sown in peas, and the peas should be allowed to die on the land for a soil cover during the winter, and to be plowed under in the spring, and the cultivation renewed. This cultivation till July, and sowing in peas, should be kept up till the trees have made growth enough to be getting into bearing shape. Then a check to the rapid growth will tend to the formation of fruit spurs and fruit bearing. This, with most varieties, will be when seven or eight years old. We would then seed the land down to grass, using a mixture of orchard grass, red top and Kentucky blue grass. As fast as the grass gets tall enough run the mower through the orchard, and let the cut grass lie to decay and form a mulch over the whole land.

DO NOT PASTURE THE ORCHARD.

If you intend to turn stock into the orchard to pasture on the grass, you will defeat the very object for which the grass is used. If you cannot resist the temptation to pasture the land, you had better not put it in grass, but keep on with the cultivation. Hogs, with noses jeweled to prevent rooting, may at times be allowed in the orchard to gather the wormy fruit, but nothing further than this should be attempted.

MANURING THE ORCHARD.

During the early years of tree's life there is no particular objection to the use of stable manure in the orchard, for growth is then what is wanted. But after the trees are well developed there will be an abundance of nitrogenous matter from the plowing under of the peas annually. The

carrying off of potash in the fruit crop is very heavy, much heavier than in the case of grain fields. There is no better application that can be made to an orchard than hardwood ashes. Raw-bone meal is also an excellent dressing for the orchard, and the best application probably that can be used as an annual dressing is 400 pounds per acre of equal parts of bone meal and kainit.

WHAT VARIETIES OF APPLES SHALL WE PLANT?

This is about the first question a man is apt to ask when about to plant an orchard, and is about the hardest one to answer for all localities. If the orchard is designed for family use, then one will want a greater variety than if it is intended for growing apples for market. Apples like the red Limbertwig are certain bearers and heavy bearers, but people do not want them when they can get better apples. True, the market will take a very inferior apple, like the Ben Davis, when it is handsome and a good keeper, and Ben Davis being both, has come to be grown more largely than most other apples.

The following list comprises only those that have been found adapted to our section:

SUMMER APPLES.

Carolina Red June.—A bright red and handsome apple, and salable as a market fruit.

Early Harvest.—Larger than the last, and bright yellow in color. One of the best.

Hames.—A large and fine looking Georgia apple, ripening among the earliest.

Red Astrakan.—Large, deep red, and one of the most salable early apples.

May Yellow.—The earliest apple grown. Small in size and yellow in color.

Hunge.—One of the finest late summer or early autumn apples.

Horse.—One of the most popular late summer apples in all parts of the State.

Yellow Transparent.—This yellow apple promises to be the leading early apple. It is of good size and quality, and is one of the earliest bearers. The trees being naturally of small size makes it valuable for small home grounds.

Summer Pearmain.—One of the finest quality of apples of its season. Ripe in August and very good indeed.

FALL APPLES.

Bonum.—Known all over the State as Magnum Bonum, but the rules of the American Pomological Society have cut it shorter as to name. Mr. T. T. Lyons, a noted fruit-grower of Michigan, once said to the writer: "Your North Carolina Bonum apple is the best fall apple in the United States." While we did not fully agree with him, we do consider the Bonum as one of the best fall apples, and one better suited to all parts of the State than any other apple.

Buckingham.—A very large and showy apple, and of good quality, ripening in September.

Carolina Beauty.—An apple of fine quality, which originated in the eastern part of this State, and hence may be expected to do well in that section.

Rome Beauty.—A showy, late fall or early winter apple of medium quality, but one that will sell on account of its bright color.

Hoover.—A large, very dark red apple of good quality, ripe in September.

WINTER APPLES.

Paragon, or Arkansas Mammoth Black.—An apple of large size and showy appearance, which promises to be one of the best for the western section of the State.

Albemarle Pippin.—We only mention this noted apple here to say that it succeeds well in the mountain coves of the western part of the State, but is worthless elsewhere. Where it succeeds there is no finer apple, either for home or market.

Ben Davis.—This is one of the most showy apples, and the tree is a regular bearer everywhere and sells well, but in our opinion it is about as poor an apple as can be grown, and we do not advise it for family use. It is now being so largely grown that its inferior quality must soon become familiar to all buyers, and we do not advise its planting in large numbers, even for market. Its redeeming quality is that it will give apples of showy appearance when all others fail.

McCuller's Winter.—This promises to be one of the best apples for the sandy lands of the eastern part of the State.

Edwards.—This is a seedling of the Hall, and twice as large as that variety and fully as good and as good a keeper.

Mattamuskeet.—This apple originated in the peaty lands of the coast section, and is only suited to that region, where it is one of the best of winter apples.

Nansemond Beauty.—A Virginia apple that does well in this State. Season, early winter here.

Royal Limbertwig.—A great improvement on the old Red Limbertwig. A good keeper and a fairly good apple.

Winesap.—One of the very best winter apples, and one of the most salable. There is a new variety known as Stayman's Winesap, which is claimed to be a great improvement on the old one. I have not grown this, but have grown the old Winesap, and it is as good as any I have ever tried.

York Imperial.—This is one of the best keepers and a showy apple, and is taking high rank as a shipping apple. It has been called erroneously by some Johnson's Fine Winter apple, but the foregoing is its true name. This and the Winesap are about the best market apples that can be grown here.

Pine Stump.—This is a very fine flavored late fall or early winter apple, but is not a late keeper. Its fine quality will sell at any time.

Van Hoy.—A Forsyth county apple that is highly esteemed by those who have grown it, and is considered to be one of the best large winter apples.

Yates.—A small sized Georgia apple, of fine quality and good keeping character. It is a good heavy bearer.

CRAB APPLES.

Crab apples are very ornamental as trees, and the fruit is useful for preserves and jelly and for cider. The best preserving sorts are the Red and the Yellow Siberian and Transcendant, while for cider making the Hughes's Virginia Crab, Waugh's Crab and Jones's Cider are the best.

GATHERING AND MARKETING APPLES.

There is no one point in apple-orcharding in which there is so general a need for information as in the gathering and handling of the apple crop. The practice of the growers in the best apple sections of the State in handling their apples is simply ruinous to their profitable sale. Shaking the apples from the trees and gathering them from the ground, and then dumping them in bulk into the body of a springless wagon to sell to dealers in the mountain towns is a common practice. And when the dealers get hold of them they dump them loosely into large crates, and ship them to the towns of the eastern part of the State, where they usually arrive bruised and worthless, and the shippers wonder why North Carolina apples do not sell in competition with the Northern fruit. Apples of all sizes and colors, good and bad, knotty and perfect, are dumped into the same receptacle, a crate not fit to ship apples in at all, and the only wonder is that they bring anything at all. And they do bring very little when good fruit is abundant. Go to a groceryman in Raleigh and price apples, and he will say: "Here are some good Northern apples for so much, and here are some stuff from the mountains of North Carolina, which you can have for half price or less." And the difference in the price is not because the apples from the mountains are inferior sorts to the others—though there are usually too many poor Limbertwigs among them—but because of the condition of the fruit. The Northern apples are handled and shipped by men who know how to pack and handle apples and they come to hand in good condition. They are properly culled and the barrel has in it but one variety of apple, and the name is branded on the barrel, for they are not shipped in crates to be cut and bruised for lack of tight packing.

HOW TO GATHER APPLES.

Never shake the fruit from the tree and never pack for market any apples that have fallen from the tree. Gather every apple by hand and place it carefully in a basket. The apple growers North use ladders, made on the place, of a light pine pole split some distance from the butt end, and rungs stuck in to keep the lower end apart, while the entire upper part is but a single pole with rungs stuck through. This kind of a ladder can be stuck in anywhere on the tree and makes it possible to reach all the apples. It is simply like a long wagon pole with rungs stuck through. The gatherer takes a light basket and lets it down by a rope when full. The barrels are taken into the orchard and packed right there. The name of the apple is marked on the bottom of the barrel, which is to be the top when opened. A layer of apples is then placed, stem down, on the bottom all over, so as to make a good appearance when opened, but the same quality must run all through the barrel. The apples are then poured carefully into the barrel, which is

shaken gently to settle them, and the barrel is filled a little above the top. The head is now laid on, and with a screw press it is forced in, and the apples are then perfectly tight. The hoops are driven down tight and the head linings nailed in place, and when the barrel is opened after long journeyings it will be found with the imprint of the head on the upper layer of fruit, showing that no apple has moved. The tight packing is not possible in a slatted crate made of laths, such as are sent to Raleigh from the western part of the State.

KEEPING WINTER APPLES.

The process just described for packing for market is the best that can be devised for keeping the apples. Apples that are to be kept for home use will keep better tightly packed in the barrels in the orchard as fast as gathered. If not sold at once, pile the barrels on their sides in a cool, airy place under shelter, and as the weather gets colder put them in a tight house, on their sides, with a thick layer of straw under them, and, in very cold snaps, a thick layer over them. This will keep them in any weather we have if in a close building, for it takes a very low temperature to freeze an apple packed in a close barrel and sheltered. There is more danger of keeping them too warm than too cold. Just at or a little above the freezing point of water will keep them all right.

Tight barrels, tightly packed, are the only packages fit for winter apples, and any attempt to ventilate the barrels is worse than useless. Never ship them in lath crates if the fruit is expected to sell well.

THE SWEET POTATO CROP.

In the South, the sweet potato is more a crop of the farm than the garden, but its production for the northern market belongs to the trucker rather than to the farmer. This is one of those crops with which glass can be used with profit and success. We, years ago, abandoned the practice of starting the plants in a manure heated hot bed, because the practice encouraged the growth of the rot fungus, and we had more trouble from the "black shank" in the plants, which is caused by the same fungus that afterwards attacks the roots, when manure was used. We have had little of this trouble since we began to grow the plants in a cold frame, depending entirely on the heat from the sun through glass sashes to start the growth. We bed the potatoes in the cleanest sand obtainable and cover with the same an inch or more above the top of the potatoes. The bed is then watered well with lukewarm water, and the sashes put on and kept close till signs of sprouting appear. After this, air must be given whenever the sun shines, and the bed must be kept moist by repeated waterings or by full exposure during warm rains. In this way we have never failed to get good plants. They make far better roots in the sand than they would if bedded in a rich soil, and transplant more readily. We consider April 1st as early enough to start the beds in the latitude of central Virginia, but southward it would be better to start a little earlier, or six weeks before time to set in the open ground. There is seldom any gain by too early setting of the plants, for the potato is a tender plant and needs to have the ground warm to make its best growth. This is one of the crops for which deep plowing is not best. The best roots are made where they have a hard bottom to

form against to prevent their becoming long and crooked. For the same reason, the old practice of making a very high hill is an error. The best crops are grown where the ridges are never made higher than most of our farmers hill cotton or corn, and the work can be done with the same tools. Some wait for what they call a "season for setting the plants"—that is, they want the land wet from rain. This is an error, for the plants set in wet land will often get a hard crust around them that checks their growth. We prefer to have the soil merely in good working order. The plants are drawn carefully from the bed, and at once set in buckets or tubs of water. A boy takes a bucket along and hands to the planter each plant dripping with water. It is set deeply, and puddles itself into the soil. Only the tip of the plant is left out of the ground, and the earth is closely pressed to it. The previous preparation of the soil is of the greatest importance. We would have said that the plowing should be shallow, but it should be repeated and thorough, so as to mix the broadcasted manure very completely with the soil. The sweet potato is one of the crops which need little application of nitrogen. An excess of nitrogenous matter in the soil leads to a rank growth of vines without a corresponding crop of roots. We do not mean that sweet potatoes cannot be grown on rich land. If the mechanical texture is all right, it matters little how fertile the soil, provided the fertility is well balanced. The plant can use the nitrogen profitably if the ration is balanced with a sufficient amount of potash and phosphoric acid. It is the excess of nitrofen that causes the plants to run to vines. The form in which artificial nitrogen is supplied is also of importance. It should all be in some good organic form, as cottonseed meal, blood, tankage, etc., and no nitrate of soda should be used, as the sodium salts are not good for this crop. Potash is the most important element.

I know that the practice has become common among the growers of the Eastern Shore to use large quantities of salt in the preparation of a compost for the potato crop, and that many have the notion that salt is a good manure. The fact is, that in the way the salt is used in compost beds with woods earth during the winter, the salt is mainly gone by the time the compost is applied to the land, and the only good it does is to render soluble certain matters in the vegetable matter that it is mixed with. This could as well be accomplished by the use of kainit in the same way. But the use of chlorides has a tendency to deteriorate the quality of the potato. The fad for the use of salt on the sweet potato crop that has been so prevalent among Virginia sweet potato growers will soon be a thing of the past, as they begin to find the practice tends to exhaustion of the soil. While potash is of the greatest importance to the crop, the form in which it is applied is as important as it is for the tobacco crop. We would never use potash except in the form of sulphate unless it could be cheaply gotten in the form of hard wood ashes, which is doubtless the best shape to get it if they can be had cheaply enough in comparison with the sulphate. The best way to prepare the land is to apply broadcast a good coat of leaf mold from a piney woods, which was piled up the fall before in layers with lime. Then apply all the other fertilizers in the furrow under the beds. If a good coat of lime and leaf mould compost is added, all over the land, there will be no need to use any nitrogen for the crop. Otherwise, we would then apply a mixture of acid phosphate and sul-

phate of potash in the furrow. Make the mixture 1,600 pounds of acid phosphate to 400 pounds of high-grade sulphate, and use 400 pounds per acre in the furrow. Lap two furrows over the first and flatten them with a light roller before setting the plants, so that the moisture will be retained better in the early stages of growth. As soon as the plants start to grow, start the cultivator close to the rows. Keep the cultivator running, and there will be little need for hand hoes. In laying by, use a cotton sweep to finish up with. Toss the vines over into the alternate rows out of the way, go through with the sweep, and then reverse the vines to the finished rows and complete the work in the alternate rows. For potatoes to keep all winter, do not depend on the spring-set plants, but prepare a new area and plant it with cuttings from the early plants in July. This can be rapidly done by running out and fertilizing the beds. Then split them with a plow and lay the cuttings along the furrow and plow the land back on them. Let a hand follow the plow and tramp the earth tight to the cuttings. Work these just as the early planted ones. The best seed for the next year's bedding is produced from these cuttings set in August, so as to have the roots all of small size. There will be far less of the black shank in plants grown from these, as the spores are not so apt to be transmitted on the cuttings. The rot is promoted by the constant repetition of the crop on the same land, for the soil becomes infected with the spores of the fungus. The best preparation for the potato crop is a pea or clover crop the year before, the stubble to be turned over in preparation for the crop and dressed with lime. In lack of this, use the lime with the wood's earth. If the crop is grown to complete maturity, and the intention is to store for winter, the handling becomes a matter of the greatest importance. When the first frost nips the tops, cut them off closely at once, as a saphrophytic fungus starts on the decaying vines and will be communicated to the roots if they remain attached. Dig in dry and sunny weather, and let the potatoes have full exposure to the sun during the day. Do not allow any throwing into piles, but let them simply lie along the rows. Have crates to gather them and haul them in, and never dump them into or out of a cart. In fact, handle them as tenderly as eggs. This is the important point in the keeping of the roots. If grown on a large scale, a potato house with slatted shelves for storing and a flue and furnace to raise the temperature when needed, is a necessary adjunct. But we have kept them till June banked out doors with only a board shed over the banks. Put down a thick layer of pine straw, or other straw, if you have no pine leaves. Pile the potatoes carefully on this— not more than twenty-five bushels in a heap. Cover thickly with the straw, and build a board shelter over all to keep off the rain. Put no earth over the potatoes till they have had a chance to sweat and dry off unless the weather should turn very cold, and in this event cover well except a small space at the top. After the potatoes have had time to dry off under the cover of straw, put on a thick cover of dry soil. The shelter overhead will keep this dry, and dry earth keeps out more cold than wet earth. If handled properly in digging and burying, the potatoes will usually keep well by this method, provided that no diseased roots are put in, and no cut or bruised ones. In growing potatoes for the Northern markets, even as far south as Baltimore, it is necessary to grow the dry yellow varieties, as they have not yet learned the superiority of our Southern yams. When the city people cease to spoil a

potato by steaming it, they may learn to appreciate the soft and sugary yams, which will not submit to such cookery. I was amused lately at the statement of Mr. W. F. Brown, in the "Practical Farmer," that the difference between the Southern yam and the sweet potato was that the yam is an underground stem, while the sweet potato is a root. Now, as the Southern yams are simply varieties of the same plant as the Northern sweet potato, both being *Ipomœa Batatas*, Mr. B.'s statement is an error. He has probably never seen a Southern yam, and supposed it to be a real yam, like the Chinese. In that case he would have been correct, as the yam is a tuber or underground stem, while the sweet potato, in all its varieties, is a tuberous root, the upper part of which is stemlike in its nature.

W. F. MASSEY.

SECOND CROP AND LATE IRISH POTATOES.

June is the proper time to prepare the land and plant Irish potatoes for winter keeping, and also to prepare the seed and get ready the land for planting the second crop of Irish potatoes, from which the best seed is raised for the early spring crop. For winter potatoes prepare the land and plant as for the spring crop. We prefer to plant whole medium sized potatoes rather than cut sets. If, however, the seed is too large to plant whole, do not cut to less than three eyes. It is unreasonable to expect strong, vigorous plants, from small bits of seed with only one eye, and without strong vigorous plants, especially at this time of the year, it is useless to expect a good yield of tubers. Last year's crop was such an exceptionally large one and so over-supplied the market that we anticipate there will be the usual revulsion, and instead of being a full crop planted this year there will be only a small area set out and the price will improve. At any rate, plant a full crop for home use, if you do not set out some for the market. Remember that this crop is one of the few crops which make a better yield from the liberal use of commercial fertilizer, if that fertilizer be rich in potash, than from the use of farm-yard manure directly on the crop. Farm-yard manure should be applied to the previous crop to enrich the land. If used directly on the potatoes, they are very apt to be scabby.

The second crop Irish potatoes, for which there has been so large a demand for the past few years and which demand is likely to continue, as they make the best seed from which to raise the early spring crop, should be prepared for this month by selecting from the early planted crop, at digging time, all the medium small-sized potatoes. These selected potatoes should be spread out in a shady situation, and there remain exposed to the atmosphere until they become green. They should then be bedded down in a shady, moist place on some nice light soil just sufficient to cover them, and be allowed to remain until they sprout. In the meantime, the land intended to be planted should be well prepared and fertilized. Lay off the rows two feet six inches apart and throw out the soil so as to leave a deep furrow in which to plant the sprouted sets. When the sets have just nicely sprouted, take them up from the seed-bed, set them out in the bottom of the furrow and cover them lightly with soil and make this firm upon them either by tramping or running a small roller in the furrow. Set out in this way, few will fail to grow. As the plants grow, work in the soil from the sides of the furrow until a level surface is obtained. The end of June and beginning of July is the best

time to set out this second crop, and they will then mature sufficiently for seed before frost.

TOBACCO CULTURE AND FERTILIZATION.

The methods of tobacco culture and curing are so various that it will be impossible, in a short article, to give any directions that will be of general use. The preparation of the soil for the crop, and its subsequent cultivation, and the curing of the crop, all vary with the region and the kind of tobacco that is grown; and to some extent, the fertilization will also vary with these different conditions. For the growing of the heavy dark leaf, a soil abounding in humus, and on which a growth of legumes has been buried, is essential, while for the golden leaf tobacco, a smaller amount of nitrogenous matter, is needed; but no matter what kind of tobacco is grown, there is one requisite for all, and this is potash in an available form. All growers understand the need for an abundance of potash for this crop, but it is not so generally known that the form in which the potash is supplied is more important than the potash itself. Farmers are too ready to assume that a low price per ton means cheap potash, and hence when they want potash, and see that kainit in the crude state is offered at about one-fourth the price of the muriate and high grade sulphate, that it is the cheaper form, they do not reflect that the market price is based upon the amount of actual potash which the article contains. As the potash salts are all imported from Germany, the price at the seaboard is nearly uniform for the potash contained in each. But when the salts are shipped to the interior, the cost of the potash in each form rapidly changes by reason of freight charges. It costs just as much to freight a ton of kainit, containing 12 per cent. of potash, as it does to freight a ton of muriate or sulphate containing 50 per cent. of potash. Any one, then, can see that the potash in the kainit rapidly becomes more costly than that in the concentrated forms; but this increase in price is not the chief reason why tobacco-growers especially should avoid the use of the crude salts of potash. Kainit has associated with it a very large percentage of the chloride of sodium (common salt). If this is applied to the tobacco crop, it will result in serious damage to the market value of the leaf; as it is well known that the chlorides are injurious to tobacco, particularly to that which is to be burned. This will be noticed to a less extent when the muriate is used; but the muriate is still a chloride, and to be safe, the chlorides should be entirely avoided, and potash should be applied to the tobacco crop only in the shape of sulphate. There are two forms, too, of the sulphate, one of which has about 30 per cent. of potash, while the other or high grade has 50 per cent. It is always a matter of economy to buy the high grade sulphate, and if anyone offers sulphate or potash at a particularly low price, you may be sure that it is the low grade, and that if far in the interior, the low price is only apparent, and that the actual potash costs more than in the higher priced high grade. The most complete fertilizer experiments on record are those of the late Major Ragland, for the Virginia Station, and those made at the North Carolina Station. In the Virginia experiments, it was found that the form in which the nitrogen was applied, had as important a bearing upon the profit of the crop as the form of the potash, and that the organic nitrogen from dried blood gave by far the best results. The greatest profit per acre was where the soil was fertilized with the following mixture per acre:

Dried blood, 160 pounds.

Sulphate of potash, 120 pounds.

Acid phosphate, 114 pounds.

This gave an increased value to the crop over an unfertilized plat of \$60.62 per acre, while the actual cost of the application was but \$3.25. Where nitrate of soda was used, to the same value as the dried blood, as a source of nitrogen, the profit of the crop was not more than two-thirds as much as from the application of the dried blood, showing that the sodium salts even when not in the shape of a chloride, may have an injurious effect, and refuting the notion that some are persistently advocating that soda can take the place of potash in any of our cultivated plants. The soda in the nitrate did not help out the potash at all, but really retarded its effects when it was applied in connection with it as a nitrate, possibly by checking the nitrification of the organic nitrogen already in the soil, while the ammonia in the blood simply promoted the complete nitrification of all at hand. In the fertilization of the tobacco crop, it is important not only to avoid the chlorides, but the chloride of sodium in particular, and to use potash, which is the most important element for this crop, only in the form of a high grade sulphate.

W. F. MASSEY.

FARM MANAGEMENT.

Through the courtesy of Mr. J. F. Jackson, editor of the "Southern Planter," Richmond, Va., we cull from a year's file of this valuable paper many practical suggestions for farm management during each month of the year. The "Southern Planter" is one of the most valuable agricultural papers we know. It is a matter of regret that limited space requires condensing the articles from which the following suggestions were taken:

SEASONABLE EMPLOYMENT.

WORK FOR JANUARY.

The month of January being the one in which, as a rule, the least work can be done out of doors on a farm in the South, is a most convenient one for a review of the results of the last year's work and a planning of the work of the coming year. Successful farming being so largely dependent on climatic conditions, which vary from year to year, it is impossible to lay down hard and fast rules deduced from past failures or successes; but these can and do establish principles which have great bearing upon future operations, whatever may be the climatic conditions. A very dry or a very wet year is prejudicial to a successful crop. These facts cause the thoughtful farmer to inquire as to how the moisture can be conserved in the event of a dry year coming upon us, and how injury from excessive wet can be best prevented if that should be the character of any particular year.

The growing danger of drouth is due largely to the reckless destruction of the forests. Steps ought to be taken everywhere and by everyone to prevent the unnecessary destruction of timber. Deep plowing and sub-soil plowing is a remedy within reach of each individual, and this remedy has the advantage that if not needed to prevent injury from drouth, it is equally effective in preventing injury from too great moisture. Land which is broken deeply and subsoiled will absorb and hold winter

and spring rains, and yield this up to the growing crops as needed; and by careful and frequent cultivation this moisture can be so conserved as to last over a long period of drouth. If excessive rains are the characteristic of the season, they will sink deeply into the ground, and, after the soil and subsoil are saturated, any surplus will pass off into the depths of the earth, and thence into the rivers, without washing and wasting the land. Time may be well spent during this month in plowing deeply and subsoiling land intended to be put into crops this year whenever the land is dry enough to permit of this work to be done. Do not, however, make the mistake of plowing wet land, for this does not save, but makes work, and is certain to result in an unsatisfactory crop. The importance of deep plowing and subsoiling is not half so fully realized as it ought to be.

Another important work which should have attention this month is the planning of the rotation of the crops to be raised this year. Because a field has produced a fair crop of corn, or wheat, or other crop last year, is no reason why it should be called upon to produce a similar crop this year, but rather a reason why it should not be asked to do so. If a judicious rotation of crops is maintained, the exhaustion of land is a very slow process, and with the application of manure or fertilizer practically an impossible thing. Except upon rich alluvial river bottoms, which are practically inexhaustible, corn or small grain crops should not succeed each other without the intervention of a clover or grass crop or a root crop. The same rule applies to cotton and tobacco crops. On selecting the land to be cropped this year, let these considerations have weight, and as far as possible observe the rule of rotation.

Carefully save and store in compact heaps all the manure from the stable and pens, and increase the bulk of this by adding to it all the trash, leaves and other waste products of the farm, and good woodmould and vegetable refuse. If the ground should become frozen, take the opportunity to haul out the compost heaps and manure piles on to the land intended to be covered, and either set it down in large heaps, or spread it over the land. This will save time later in the spring, when planting presses for attention.

WORK FOR FEBRUARY.

Do not burn off grass, weeds and trash before plowing. All our lands want humus, and this can only be had by turning under vegetable matter and farm yard manure. Before plowing land covered with a growth of weeds or trash, run a heavy harrow over it to break down the weeds. They will then be much easier to turn under. If the land is in proper condition spring oats can be sown. Spring oats, unless sown early, rarely make a profitable crop in the South.

Clover and grass seed not sown in the fall should be got in as soon as the land is in good order.

Tobacco plant beds should be got ready and sown at once. Select a piece of rich light land with a Southern aspect, well drained, clear of weeds, and sheltered in the north and west. Burn over with a good pile of brush to kill all weed seed in or near the surface, and then break fine and make rich with well rotted farm yard manure, or a fertilizer rich in nitrogen and potash. Mix the seed with ashes or sand, and sow evenly over the bed. A tablespoonful of seed will sow a bed 16 feet square, and

produce plants enough for an acre of land. Cover the seed by beating with the back of the spade or by tramping, and cover with plant-bed muslin.

Order your seeds and commerical fertilizers. All seeds to be sown should be tested, that the farmer may know how to sow them in order to secure the best results. Pour a little water in a plate and place a piece of flannel in it, and when the flannel is nicely and evenly dampened count out a number of seeds and spread them on the flannel; cover with a piece of glass, and place the plate in a warm place—say on a shelf near the stove. In a few days such of the seeds as are vital will germinate, and the proportion of good seed will thus be ascertained, and form a guide to the quantity necessary to be sown.

WORK FOR MARCH.

The month of March may be said to fairly commence the work of preparing the land for the season's crops all through the Southern States. Do not, however, be in too great a hurry to plant or sow crops. The land, as a rule, is still too cold for anything but oats, or early Irish potatoes. These may be got in, especially the oats, at once, though in the upper sections of country the potato will be quite as well out of the ground till April. Instead of hastening to plant other crops than these, if your land is already plowed, devote the time to fitting it better for the reception of the seed, particularly the corn land. To secure the greatest yield, corn land should be deeply broken and finely worked.

Buy a roller, or make one, and use it freely as soon as the land is dry enough not to stick to it. Wheat and oats should always be rolled. It remedies much of the injury done by the alternate freezes and thaws, consolidates the soil around the roots of the crops, and enables them to seize hold of the plant food in the soil and thicken the stand. Rolling also destroys much insect life on the younger plants. All grass land intended to be mown should be rolled, as it destroys grubs and insects infesting the roots, consolidates the land, making it easier to mow and rake with machines, besides making a quicker and denser growth.

The land intended for tobacco should be plowed and broken as soon as possible. When setting out your land for the season's crops, don't forget to set out a plot, say of half an acre or an acre, of a fair average of the land of the whole farm, as an experiment plot. Let this be as near uniform in fertility, texture of soil, slope and aspect as can be. Divide it into plots, say of one-tenth of an acre each, extending the whole length of the plot, and leave between each plot a strip two or three feet wide. Here you should test different fertilizers and manures upon different crops. It is the only way in which you can ascertain the requirements of the farm.

WORK FOR APRIL.

To make a successful crop, corn needs to grow right away, from start to finish, without check. The time of planting should be regulated by considerations of locality and weather. Too early planting is not to be advised anywhere. Experience points to the period between the middle of April and middle of May as the best. As the land and atmosphere should be warm when the seed is planted, the time of planting should be subject to local climatic conditions being favorable. Care must be taken to give sufficient distance between the rows or checks to permit of

the free action of the sun and air. For the tall-growing Southern varieties of corn, three and a half to four feet apart in the rows, with from two and a half to three feet between the plants, has been found to give the best results. If the land be rich, two stalks may be left in each hill.

Cut-worms and crows are often troublesome in corn when first germinating. The cut-worm may be successfully destroyed by dampening fifty pounds of bran, and thoroughly mix with it one pound of Paris green. Place a spoonful of the mixture near each plant. The worms will feed on this in preference to the plant, and be poisoned. Crows may best be combatted with poisoned corn scattered in the field.

Do not plant too deep; from four to five inches has been found to be the best depth. Cover the seed with a light ridge.

While giving attention to the preparation of the land required for the corn, cotton and tobacco crops, do not overlook the important forage crop required to meet the needs of the live stock. Too often the only preparation made to meet the calls of the animals has been the fodder from the corn crop. This is not sufficient for their wants. In July and August pastures become burnt and bare. Then there should be a field of cow peas or soja beans to cut and feed to the stock. Without such a help stock are apt to lose in July and August what they have gained in May and June.

WORK FOR MAY.

May is the one month in the whole year upon which, in the northern tier of the Southern States, depends most of the success to be attained on the farm. Before planting a grain of corn, see to it that every acre of land to be planted is put into as fine a condition of tilth as possible. Do not hesitate to harrow and reharrow until the land to the depth broken is in the condition of a fine garden bed. Deep fall and winter plowing, perfect preparation of the soil before planting, and shallow, frequent cultivation during growth, are the prime factors in securing great yields. The records show that the best average yields have, over a long series of years, been made by corn planted in May, before the 20th of the month. Formerly, the prime necessity in cultivating the corn crop was thought to be the destruction of weeds. While this is necessary, a much more important purpose is that of conserving the moisture. Both these purposes can be best attained by shallow cultivation and the preservation of a level surface between the rows and around the plants. After the corn has been planted, the plow is out of place in the corn field, and its use is undoubtedly attended with injury to the crop, as it cuts the feeding roots of the corn, which are mainly to be found in the first four inches of the soil. The best implement with which to give the first two workings is a seed-harrow. Let this be run lengthwise of the rows, and very little, if any, corn will be pulled up. After these two workings, use a cultivator, or a disc-harrow, for the next working. Set the discs carefully, so as not to strike the plants. The later workings should be with a cultivator, like the Iron Age cultivator. Repeat the cultivation so frequently as to keep the surface always covered with a mulch of fine, loose soil, so long as it is possible to work between the rows, or until the corn is in tassel.

Get the tobacco land into good condition for planting as soon as possible, so that when the plants are ready they can at once be set out in the first good planting season.

Sweet potatoes may be set out towards the end of the month, though may prefer not to plant until June.

Peanuts should be planted. This crop is a lime-loving crop, and much better results can be had if the land is given from twenty to twenty-five bushels of lime per acre previous to planting the crop, and this is well worked in. On all land not planted with other crops, sow cow peas (black peas). They will make feed for stock and feed the land. By no other means can the Southern farmer so cheaply and so effectually improve his farm.

WORK FOR JUNE.

Corn may continue to be planted up to the 10th of June with reasonable prospect of making a good crop, especially on low, alluvial lands. Corn for the silo may be planted to the end of the month. In planting for silage do not attempt to plant too thickly. To make good silage the crop should be well grown, well cured, and be well matured. Rows three feet apart, with the seed dropped a foot apart in the rows, is close enough. Keep the cultivator running in the corn crop as long as possible. After every shower cultivate as soon as the land will work well. In this way much may be done to eke out the deficiency in rainfall in case of dry weather. Cultivate shallow and keep the surface level. Frequent stirring of the soil conserves the moisture in the land, increases the plant food in the land by causing the air to circulate more freely through, thus supplying the needed oxygen to the roots. Keep down all weeds. They pump moisture out of the soil as fast as the crop itself without giving any return for this abstraction.

At the last working of the corn crop sow peas, clover (red or German), or winter oats in the crop. These will serve either to increase the feed for stock or to plow down as improvers of the soil when matured, and this without materially interfering with the yield of the corn crop.

Set out sweet potatoes, and do not be afraid to plant as many as possible. If not wanted for the table or market, they are excellent food for hogs and cattle.

The grass and clover crops will be ready for harvesting this month. Do not overcure the hay, whether from grass or clover. If there is no dew or rain in the crop when housed, even a large degree of natural moisture will not prevent the hay from being a fine quality. It will heat considerably; but if kept closely packed and the air secluded, will not mould or spoil. Be sure, however, not to pack away with the dampness of dew, or rain upon it. Before the end of this month the wheat and oats crop will be ready to cut. See that the mowers and binders are overhauled and put into good working order, and that duplicate parts of such as are likely to be wanted are on hand before the grain is ready to be cut. Cut before dead ripe. Have a sufficient number of hands to keep close up to the binder, and shock up every sheaf before leaving the field.

WORK FOR JULY.

The season for planting or seeding crops for this year's harvest is now practically over. As the wheat and oat fields are cleared of the grain, break them with the harrow (the Acme, Disc, Cutaway or Spading harrow is best), and seed with crimson clover or cow peas, instead of being allowed to produce a crop of weeds. The idea that a crop of

weeds improves the land is a fallacious one. They abstract plant food from the soil.

The second crop of Irish potatoes should be planted during this month in Virginia, and not later than August in North Carolina.

Ruta-bagas should be sown during this month, and turnips a little later. Turnips are not only good for salad and the table, but are an excellent ration of cattle. Live stock, of all kind, like human beings, thrive best on a variety of foods, and roots should be grown to give this variety. Especially where sheep are kept should roots be made a regular farm crop. No kind of food during winter will so help the sheep as a daily ration of cut roots. The land should be laid off in rows two feet six inches apart, so as to permit of cultivation, and the seed drilled in the rows at the rate of about two to three pounds to the acre. If it is only desired to use turnips as salad and for a pasture, they may be sown broadcast on land broken with a harrow only. Turnips may be sown with German clover on wheat and oat stubbles, and they will afford grazing before the clover, and a crop for salad and the table.

Make provision for saving the straw and chaff when threshing. These are too valuable as food for stock and for bedding for the animals to be left in heaps in the field to rot. Stack the straw near the barn. Put the chaff into the barn or into rail pens, and cover with straw. When the push of the work is over in the crops, cut down all the weeds and briars growing around the house and farm buildings, on the roadside and in the fence corners. Do this before they seed.

WORK FOR AUGUST.

Crimson clover should be sown freely all through the month as the season admits. Turnips should be sown freely. They make excellent feed for cattle, sheep and hogs, and will afford grazing all the winter.

Don't waste time pulling fodder. Careful experiments have been made in a number of Southern States, and they all establish the fact that it does not pay to pull fodder. When the corn is well glazed, cut it up at the root and set it up in shocks not too large, and let the corn and fodder cure together. In this way the whole crop is saved at one operation. The stalks and fodder contain as much nutriment and feeding value as the ears, and should be so saved as that this value can be utilized. Only by cutting up the corn at the roots can this be done.

Prepare land for seeding winter oats in September. Many farmers are now preparing land for them with the spading or disc harrow. This system saves cost of plowing and much time, and is successful where the land has been well and deeply plowed for the previous crop.

WORK FOR SEPTEMBER.

Winter oats, to make the best return, should be sown in September. Many failures are due to too late seeding. If there is a fair probability of giving this crop a top dressing of farmyard manure during the winter, we would not advise the use of any commercial fertilizer when seeding, as the manure will give better results.

One bushel of oats with ten pounds of German clover to the acre will give good results for good grazing and a heavy forage crop, and which, if not needed for feeding green, will make excellent hay, and be

off the ground in time to allow its being planted in corn, with the land improved by the rotation.

Cutting and housing the tobacco crop makes great progress during this month. The housing and curing of the tobacco crop is much more than one-half of the work of raising tobacco. See that the plants are not bruised or broken when being cut and carried to the barn. Much of the profit in tobacco raising is lost by inexperienced men curing crops into a type of tobacco not wanted by the market.

September is the month for the preparation of land for wheat. It should be deeply plowed, and should lie undisturbed for a week or two, and then the surface soil should, to the depth of three or four inches, receive the finest breaking with the harrow and roller possible to give it. Wheat needs a firm foundation for a good root hold.

WORK FOR OCTOBER.

Wait for a touch of frost in the air before seeding wheat, even though this should make the seeding late. The time spent in waiting may almost always be wisely spent in better fitting the land. The system of cutting the stalks of corn at the roots and shocking in the field is growing in favor. The ear, blade and stalk are thus cured together. After the corn is pulled from the stalks, do not allow the stalks and fodder to remain in the fields, wasting, a day longer than can be avoided. If you have facilities for cutting and shredding the fodder, let this be done at once, and pack the product away tightly in the barn, or in a closed shed. Exclude the air as far as possible by this tight packing, and the feed will keep perfectly. Never fear if it becomes hot. If it is not damp with rain or dew, it will not spoil. If you have no facilities for cutting and shredding, then stack the stalks in the barn or under a shed, or, failing in these conveniences, make them into stacks outside, and cover with a few boards to shed the water.

Irish potatoes should be dug as soon as the vines die down and the tubers become ripe. Dig when ground is dry. Leave in sun just long enough to dry them. Fifty bushels is enough to store in one lot. If put up in heaps on high, dry ground, cover with straw only until after the tubers have passed through the sweat, which will take from ten to fourteen days. If rain should threaten before they have finished sweating, cover with boards to keep the straw dry. After they have cooled down, cover the heaps with six or eight inches of soil on the straw and beat solid. The secret of keeping potatoes and roots of all kinds during the winter is to maintain as nearly as possible a uniform temperature, not in excess of forty-five degrees.

Take every opportunity of pushing on the work of fall plowing. Do not delay in having all necessary repairs made to cattle barns, stables and sheds. Stock should be housed in comfortably warm quarters, to prevent loss of profit. All implements and tools not in use should be brought into the barn or tool shed and be cleaned, and working parts greased.

WORK FOR NOVEMBER.

Have convenient to your farm buildings an abundance of straw and bedding material, so that the stock may be housed comfortably and the

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work of making manure for next year's crops grow continuously. It is lamentable to see how careless many farmers are in this respect, and then at crop planting time have to run off to the fertilizer merchant and spend the little money they have saved, or mortgage their unplanted crop, to pay for the fertilizer, which ought to have been made at home, and might have been for the mere labor of providing the stock with material to make it for them. If short of straw, gather leaves into the pens and store away for future use all you can take care of.

It is too late to seed any crops except rye, which may be sown all through the month. Rye is useful as a spring pasture, and for preventing washing of the land and to provide humins, making material for succeeding crops. It is worth seeding for these purposes, even when not desired as a grain crop. Sow from one to two bushels to the acre.

Renovate and improve the old grass pasture that is beginning to fail by giving a dressing of lime, say 50 to 100 bushels per acre, and then running over it with a sharp-toothed harrow. Then follow with light seeding of a mixture of the best pasture grasses, and top dress with farmyard manure, or 300 pounds bone dust and 300 pounds kainit. Early in the spring run over the field with a brush harrow, rake off all loose trash and roll with a heavy roller.

Make good roads and pathways from the house to the farm buildings and pens, and don't have to walk through the mud all winter in order to care properly for the stock.

WORK FOR DECEMBER.

Have all implements and tools carefully housed and cleaned up during bad weather. The slaughtering of hogs should receive attention as soon as the weather will permit. One of the prime requisites for securing a good curing is seeing that the natural heat is out of the carcass before salting. Let the meat hang on the gambrel long enough to thoroughly chill it all through before cutting up, but do not allow it to become frozen. Rub the salt well into the skin side of the meat; then lay on the table on a bed of salt and cover each piece well with salt. A little saltpeter sprinkled on the meat will make it a better color when cured. Allow the meat to stay in the salt a month, keeping it well covered with salt all the time; then hang up to dry, and smoke if desired. With an abundance of good wood in the shed and forage in the barn, time may be taken to figure up the profit and loss of the year's work. The farmer need never fear of going out of business so long as people continue to be born into this world "naked and hungry." He must feed and clothe them, and never, until the farmer fully utilizes the whole of what he grows at a great cost of labor and fertilizer, will he have any right to say that "farming doesn't pay." The whole profit which manufacturers of many large lines of goods make is made out of the careful utilization of the waste products which arise in the ordinary course of their business. Armour & Co., of Chicago, could not in many seasons make a profit on their meat trade if they did not carefully utilize every scrap of the animals slaughtered. It has, indeed, been said, and with truth, that they convert into a salable article everything except the squeal of the hog, and even this they can now save in the phonograph, but they have not yet found a market for it.

HOUSEHOLD RECIPES.

BREAD.

YEAST.

Boil one quart of Irish potatoes in three quarts of water. When done, take out the potatoes, peel and mash fine in a tray, having the boiling water on the stove during the process. Throw in this water a handful of hops, which must scald, not boil, as it turns the tea dark to let the hops boil. Add to the mashed potatoes, a heaping cup of sugar and a half cup of salt. Then slowly stir in the hop tea, so there will be no lumps. When milk is warm, add a cup of yeast and pour in glass fruit jars to ferment, being careful not to close them tightly. Set in a warm place in winter and a cool place in summer. In six hours it will be ready to use, and at the end of that time the jar must be securely closed. Keep in a cold room in winter, and in the refrigerator in summer.

LIGHT BREAD.

Two quarts of flour, 1 teaspoonful of sugar, 1 teaspoonful salt, one-half cup of yeast, 1 egg, well beaten, 1 pint water, a little lard. Work well, and set in a jar to rise. When light, work over very lightly and put in the pans to rise the second time, which will take about one hour; then put in the stove and bake.

FRENCH ROLLS.

One quart of flour, 1 teaspoonful salt, 2 eggs, 1 large tablespoonful of lard, 2 tapblespoonfuls of yeast. Work and knead it well at night, and in the morning work it well again; make it into rolls, put them in the oven to take a second rise, and when risen, bake them.

SALLY LUNN.

One quart of flour, three tablespoonfuls yeast, three eggs, one salt-spoonful of salt, butter the size of an egg. Make up with new milk into a tolerably stiff batter; set it to rise, and when risen, pour into a cake mold and set to rise again, as light bread. Bake quickly and serve hot.

BEATEN BISCUITS.

One quart of flour, one teaspoonful salt, lard the size of a hen's egg. Make into a stiff dough, with sweet milk. Beat for half an hour. Make out with the hand, or roll out and cut with a biscuit cutter. Stick with a fork and bake in a hot oven—yet not hot enough to blister the biscuit.

SODA BISCUITS.

One quart flour, 1 teaspoonful of cream of tartar, the same of soda, and the same of salt. Sift these together, then rub in a tablespoonful of lard, and make up the dough with milk and water.

BAKING POWDER BISCUITS.

Make in the same way as soda biscuits, only leave off the soda and cream of tartar, and put 2 teaspoonfuls of Royal Baking Powder instead.

WAFFLES.

One pint sweet milk, 3 tablespoonfuls flour, 1 tablespoonful corn-meal, 1 tablespoonful melted butter, 1 light teaspoonful salt, 3 eggs, beaten separately, the whites added last. To have good waffles the batter must be made thin. Add another egg and a cup of boiled rice to the above ingredients if you wish to make rice waffles.

FLANNEL CAKES.

One quart flour, 1 pint meal, 1 teacup milk, 1 teacup yeast, 3 eggs, 2 teaspoonfuls salt. Beat well together and let it rise till usual time in a warm place. Excellent.

BUCKWHEAT CAKES.

One pint buckwheat flour, 1 tablespoonful meal, 1 tablespoonful yeast, 1 teaspoonful salt. Make up with water, and beat till it bubbles. In the morning beat again, and just before baking stir in a pinch of soda, dissolved in sour milk or water, and a small quantity of black molasses.

BATTER CAKES.

One quart of meal, 1 teaspoonful soda, 1 teaspoonful salt, 3 eggs. Make up with buttermilk, and dissolve the soda in the milk. Fry with lard on a griddle.

BATTER CAKES MADE OF STALE BREAD.

Put a loaf of stale bread to stand a day in a pint of sweet milk. Just before tea add three eggs and one large spoonful of butter. If too thin add a little flour.

OLD-FASHIONED EGG BREAD.

One pint of meal, 3 eggs, 1 teaspoonful salt, 1 tablespoonful melted butter. Add sweet milk to make a rather thin batter. Beat the eggs well, then add the other ingredients and bake quickly.

POP-OVERS.

One cup flour, 1 cup sweet milk, 1 egg, a piece of butter the size of a walnut, a pinch of salt. Bake in gem pans. Double this if necessary.

CHEESE STRAWS.

Grate 3 tablespoonfuls of any kind of cheese, add 3 tablespoonfuls of flour, a little red pepper and salt. Add to dry ingredients 1 tablespoonful of melted butter, 1 of water and the yolk of 1 egg. Roll thin as for cookies, cut in strips 5 inches long and half inch wide. Bake 15 minutes. Serve on plate and fringed doily. Build the straws up like a log cabin. They are delicious with salad.

SWEET WAFERS.

Six eggs, 1 pint of flour, 2 ounces melted butter, 1 cup milk, 1½ cups sugar, vanilla seasoning. Bake in wafer-irons and roll.

TEA.

Tea should never boil. Pour boiling water on the tea and steep—about one teaspoonful of good tea to a half pint of water. Steep about eight minutes and serve.

COFFEE.

Mix one teacup of ground coffee with a gill of cold water, and pour on it $1\frac{1}{2}$ pints of boiling water; let it boil 10 minutes; strain through a piece of yellow cotton into a second pot; add some white of egg to the cold water and coffee if the coffee has not been glazed. Three-quarters of a pound of coffee will make one gallon.

CHOCOLATE.

One ounce of Baker's chocolate dissolved in a cup of boiling water; while boiling add three cups of milk and boil. Sweeten to taste at the table, and add a little whipped cream to each cup. Double this quantity if desired.

CAKES.

ICE CREAM CAKE.

Whites of 8 eggs, 1 cup butter, 2 cups sugar, 3 cups flour, 1 cup cornstarch, 1 cup sweet milk, 2 tablespoonfuls baking powder sifted in flour. Beat butter and sugar together; add milk, then flour and cornstarch and eggs, well beaten.

Icing.—Whites of 4 eggs, 4 cups sugar; pour 1 cup boiling water over sugar and boil till clear and candied. Beat whites to a stiff froth, then add the boiling sugar very slowly, beating all the time; add $\frac{1}{2}$ teaspoonful cream tartar and flavor with vanilla or lemon; when thick spread between the layers of cake.

WHITE FRUIT CAKE.

Use the same batter as for ice cream cake and add $\frac{1}{2}$ pound citron, $\frac{1}{2}$ pound blanched almonds, cut up fine; 1 small cocoanut or a package shredded cocoanut; flour the fruit and add to the batter with a wine glass of wine. Bake in layers and put icing between, or bake in large pans, in slow oven.

CHOCOLATE CAKE.

Six eggs, 3 cups sugar, 4 cups sifted flour, with 2 teaspoonfuls baking powder; 1 cup butter, 1 cup sweet milk; cream butter and sugar and mix in the usual way.

Fillings.—Make icing as for ice cream cake and add one-half cake melted chocolate and teaspoonful vanilla just before taking off fire; beat well and spread between layers.

CARAMEL FILLING.

One and a half pounds brown sugar, tablespoonful butter, 1 cup sweet milk; boil till hard in water; flavor with vanilla; beat till it gets thick and spread between layers. Chopped nuts sprinkled on each layer of filling makes this very nice.

FRUIT CAKE.

One pound flour, 1 pound sugar, 1 pound butter, 10 eggs, a teaspoonful soda dissolved in a small quantity of buttermilk, 1 wine glass each of brandy and wine, 2 pounds raisins, 1 pound currants, $\frac{3}{4}$ pound citron,

$\frac{1}{2}$ pound blanched almonds, $\frac{1}{2}$ pound chopped figs, 1 nutmeg, 1 tablespoonful each of mace, cinnamon and allspice, $\frac{1}{2}$ tablespoon cloves. Mix as for pound cake, flour fruit well and stir in batter; bake four hours.

TEA CAKES.

Three eggs, 3 cups sugar, 1 cup butter (or butter and lard mixed), 1 teaspoonful soda, dissolved in cup of buttermilk. Mix these ingredients well and add to the flour; it will take about two quarts. Make a stiff dough; season with nutmeg, roll out thin, cut and bake in a hot oven.

GINGER CAKES.

One teacupful of butter, 1 teacupful brown sugar, 1 teacupful sour milk, 7 cupfuls flour, $1\frac{1}{2}$ teacupfuls molasses, $1\frac{1}{2}$ teaspoonfuls soda.

GINGER SNAPS.

One pint molasses, 1 cupful brown sugar, 1 cupful butter and lard mixed. Beat the molasses till it looks light, then put it in the sugar; next pour in the hot butter and lard, one egg beaten light, one teacupful ground ginger. Have the mixture milk warm; work flour in briskly; roll thin and bake quickly.

CUP CAKE.

Six eggs, 4 cupfuls flour, 3 cupfuls sugar, 1 cupful butter, 1 teaspoonful cream tartar, $\frac{1}{2}$ teaspoonful of soda; season with mace and nutmeg; bake in small tin pans.

ROLLED JELLY CAKE.

Three eggs, 1 teacupful of sugar, 1 teacupful of flour, 2 teaspoonfuls baking powder. Beat the yolks of the eggs till light, then add sugar; beat well, then add the whites, beaten to a stiff froth; next put in the flour, a little at a time. Bake in a long pan, well greased; when done turn out on a bread board, spread the top with jelly and roll while warm, and slice as needed.

HOT WATER SPONGE CAKE.

Six eggs, $2\frac{1}{2}$ cupfuls sugar, 4 cupfuls flour, 1 cupful hot water. Beat the yolks well, then add sugar; then add the hot water; next put in the whites and add the flour last, putting in a little at a time, till it is well mixed. Do not beat after the flour is put in. Flavor with vanilla, and bake in a large biscuit pan, and cut in squares when cold. This is also very nice served hot with sauce. Add two teaspoonfuls of baking powder to the flour.

PUDDINGS AND PIES.

BREAD PUDDING.

Grate the crumbs of a stale loaf of bread and pour on it a pint of boiling milk, let it stand an hour, then beat it to a pulp, add six well-beaten eggs, one-half pound of butter, one-half pound of sugar, one-half of a nutmeg, a glass of brandy and a tablespoonful of grated lemon peel. Bake in a quick oven. Meringue the whites of six eggs and one cupful of pulverized sugar.

LEMON RICE PUDDING.

Wash four tablespoonfuls of rice, and boil till softened; one quart of milk, sweetened to taste; butter, size of an egg; when nearly cooled, add the beaten yolks of four eggs and the grated rind of a lemon; to the beaten whites of the eggs add the juice of the lemon and four spoonfuls of powdered sugar; pour the batter into a dish, put the whites on top, and bake till brown. To be eaten cold.

DRIED FRUIT PUDDING.

Boil the fruit until soft; chop it fine, adding a teacupful of the juice for sauce; make batter of stale bread soaked in milk; put the fruit in and stir well; boil in a floured bag or buttered mould; make a sauce of butter, sugar, and a little flour, adding the apple-juice hot, and spice to taste.

VELVET PUDDING.

Five eggs beaten separately, one cup of white sugar; beat well together, then stir in four tablespoonfuls of corn starch dissolved in a little sweet milk; three pints of sweet milk; let it come to a boiling point, then stir in briskly the other ingredients; then let boil until it becomes quite thick; remove it from the fire, pour into your baking dish when nearly done, take the white of eggs beaten to a froth with one cup of sugar, and pour over the top of the pudding.

APPLE-CUSTARD PIE.

Three cups stewed apple, one cup (nearly) white sugar, six eggs, one quart milk. Beat the eggs light, and mix the yolks well with the apple, seasoning with nutmeg only. Stir in the milk gradually, beating as you go on; finally add the whites, fill the crust, and bake without cover.

PUMPKIN PIE.

One quart stewed pumpkin pressed through a sieve; nine eggs, whites and yolks beaten separately; two quarts milk; one teaspoonful mace, one of cinnamon and one of nutmeg; one and a half cups of white sugar. Beat all well together, and bake in crust without cover.

SNOW PUDDING.

Half box of gelatine, four eggs, juice of three lemons, one quart of milk, one pint of boiling water and one teaspoonful of vanilla. Soak the gelatine in a half pint of cold water for half an hour, then pour the boiling water on it, add the sugar, and stir until dissolved; then the lemon juice; strain, and when cold beat with an egg-beater for ten or fifteen minutes, or until as white as snow. Stir into this the whites beaten very stiff. Pour in a mould wet with cold water, and put in a cold place.

Sauce.—One quart of milk, four yolks of eggs, half cup of sugar; boiled. Season with vanilla. Cold also.

APPLE SNOW.

Stew apples and strain them; whip the whites of three or four eggs; add to them pulverized sugar; to this slowly whip in the apples. Eat with sponge or jelly cake.

SWEET POTATO PUDDING.

One and a half pounds of potatoes boiled and mashed, cream with them half pound of butter, beaten yolks of four eggs, three-quarters of a pound of sugar, half wineglass of brandy, one nutmeg, and the grated rind of one lemon, milk to make it thin enough, and the whites of four eggs, beaten light, when ready to bake.

DELMONICO PUDDING.

One quart milk, four eggs (yolks), four tablespoonfuls sugar, three tablespoonfuls of corn starch, small piece of butter. The butter and sugar, creamed, eggs (yolks) beaten in this with the corn starch; add a tablespoonful of vanilla; stir this into the boiling milk, and let it cook until it is thick, stirring all the time; then pour into a baking pan, cover with meringue made out of the white of the four eggs and a small cup of sugar. This served with cream is very nice.

VEGETABLES.

THE FITNESS OF THINGS.

Potatoes are good with all meats. Carrots, parsnips, turnips, greens and cabbage are eaten with boiled meat; and beets, peas and beans with either boiled or roasted meat. Mashed turnips, onion and apple sauces are good with roast pork. Tomatoes are good with every kind of meat, but especially so with roast beef. Cranberry sauce and currant jelly with fowls, veal, ham and game. Capers or nasturtiums with boiled mutton; and mint-sauce with roast lamb. Pickles should always be served with fish.

POTATO PUFF.

Take two cupfuls cold mashed potato and stir into it two tablespoonfuls melted butter, beating to a light cream. When this is done, add to it two eggs beaten very light and a teacupful of cream or milk, with salt to taste. Beat again, and bake in a quick oven until browned.

SUCCOTASH.

One pint shelled lima beans, one quart green corn, cut from the cob; one quart tomatoes, prepared and seasoned as for baking. Boil the corn and beans together till done, then drain off the water and pour in a cup of milk, a tablespoonful of butter, and salt to the taste. Let it boil up, and then pour in the tomatoes. Let all simmer an hour. Baked or stewed dishes should have cracker or brown biscuit grated on top before sending to the table.

RICE.

The way they boil rice in India is as follows: Into a saucepan of two quarts of water, when boiling, throw a tablespoonful of salt; then put in one pint rice, previously well washed in cold water. Let it boil twenty minutes, thrown out into colander, drain and put back in the saucepan, which should be put near the fire for several minutes.

TO BOIL CABBAGE WITH BACON.

Quarter a head of hard white cabbage; examine for insects; lay in salt and water for several hours. An hour before dinner drain and put in a pot in which bacon has been boiling—a pod of red pepper boiled with it will make it more wholesome and improve the flavor of both bacon and cabbage.

CELERY.

Wash carefully and put in cold water to keep crisp till dinner. Remove all the green, as nothing is so ornamental as the pure white leaves of bleached celery. If the ends of the stalks have been broken, split and curl them.

TO BOIL SNAPS.

Early in the morning, string round, tender snaps. Throw into water and set in a cool place till an hour before dinner, when they must be drained and thrown into a pot where the bacon is boiling.

STEWED TOMATOES.

Peel and chop tomatoes till you have a quart; add one teacupful brown sugar, one teacupful butter, one teacupful bread crumbs, one tablespoonful salt, one teaspoonful black pepper. Stew till free from lumps and perfectly done. Pour in a deep dish, sift powdered crackers over it and serve.

BAKED TOMATOES.

One quart peeled and sliced tomatoes (not scalded), one cupful sugar, one tablespoonful butter, one dessertspoonful salt, one teaspoonful black pepper, one roll of bread. Spread a layer of tomatoes on the bottom of an earthen (never a tin) baking dish. Put over it half the sugar, butter, pepper and salt, and crumble half the roll over it in small bits. Then spread another layer of tomato, sugar, etc., ending with the remaining half of the roll. Grate cracker or hard brown biscuit on top and serve.

TO COOK ASPARAGUS.

Wash well, scrape, cut off the tough end, tie up in bunches and put in boiling water with a spoonful of salt. Boil thirty minutes, or till tender. Lay it on slices of toast in a dish, pour melted butter over it and serve hot.

CORN PUDDING.

One dozen large ears corn. Cut off the top of the grain, scrape with a knife, so as to get the heart of the grain without the husk. Season with a teacup of cream, a large tablespoonful butter, salt and pepper to taste. Bake in a dish.

CORN FRITTERS.

Three dozen ears corn, six eggs, beaten well; three tablespoonfuls flour; salt to taste. Grate the corn, add it to the flour, and gradually mix with the eggs. Beat all hard together. Drop in oval shapes, three inches long, into a pan, in which fry them brown, in equal parts of lard and butter. A batter cake turner is convenient for turning them.

TO COOK PARSNIPS.

Boil the parsnips till thoroughly done. Serve with salt, pepper, butter and cream; or mash the parsnips, mix with an egg beater, and season as before.

TO COOK SALSIFY.

Wash, trim, scrape the roots and cut them up fine. Boil till tender, mash and season with pepper, salt, bread crumbs, butter and milk. Put in a dish and bake brown.

TO DRESS CUCUMBERS RAW.

Gather early in the morning, peel, lay in cold water till just before dinner. Then drain, slice as thin as possible into ice water, which drain and then fill a dish with alternate layers of sliced cucumber and thinly sliced white onion, sprinkled with salt and pepper. Pour a cup of weak vinegar over it and lay a lump of ice on top.

OKRA.

Boil young okra till tender in salt and water. Drain, add half a tea-cup of cream, and a heaping tablespoonful of butter. Let it boil up, turn it out in a dish, sprinkle salt and pepper over it and serve hot.

TO BOIL IRISH POTATOES.

Old potatoes must be nicely peeled and dropped in boiling water, covered with a lid and boiled hard half an hour. Then drain off the water and set by the fire. This makes them mealy.

TURNIP SALAD.

Pick early in the morning. Wash one peck and put in cold water. Have ready a pot of boiling water in which a piece of bacon has boiled several hours, and the amount of water become much reduced. Take out the bacon, put in the salad, put the bacon back on top of the salad, and boil till very tender. Dip from the pot with a perforated skimmer, lay in a deep dish, skim the fat from the liquor and pour over the salad. Cover with nicely poached eggs. Cover and send to the table hot. Any other kind of salad might be cooked by this recipe.

EGGS.

A raw egg, swallowed immediately, is very effective in removing a fishbone which has become lodged in the throat. The white of an egg is an excellent application for a burn. If mustard is mixed with the white of an egg, a blister will seldom follow the application of the plaster.

Hoarseness and tickling in the throat are relieved with the gargle of the white of an egg beaten to a froth with a tumblerful of warm, sweetened water.

If the yolks of eggs are well beaten, and a little flour sifted over the top, they will keep for a day or two; but leave the whites unbeaten, if not used at once.

An egg in a bottle is a great curiosity. Soak an egg in very strong vinegar until the shell softens, when it can be gently forced lengthwise into a wide-mouthed bottle. Pour very cold water over it repeatedly, and it will resume its natural shape.

To restore the color to black kid gloves, apply with a soft sponge the white of an egg beaten with a small quantity of good black ink.

An old, but very effective remedy for an obstinate cough is to place two or three whole eggs in very strong vinegar (boiled down to increase the strength if necessary). In three or four days the acid will have consumed the shells. Beat the mixture well, and thicken with honey. Take two tablespoonfuls before each meal.

When eggs are plentiful and cheap, save all the shells; when they have accumulated, crush them very fine and dry them. Beat half a dozen eggs and stir the shells into the mixture, then spread and dry quickly. Put into a thin muslin bag and hang near the fire to keep the contents dry. When eggs are high or scarce, a tablespoonful of this mixture, soaked in cold water several hours, will settle coffee as well as a whole egg.

The yolk of an egg is a very good substitute for cream in coffee, and will answer for three cups.

A raw egg beaten with a little pulverized sugar, half the quantity of cream or milk, is excellent for convalescents or elderly people. Very sick people can sometimes eat the yolk of a hard-boiled egg when the white cannot be eaten with safety.

The skin of a boiled egg, moistened and applied to a boil, will cause suppuration and relieve soreness in a few hours. It is also an excellent application for a sty or inflamed eye-lids.

A plaster composed of the yolk of an egg and salt will often relieve pleurisy, kidney and neuralgic pains.

SOFT BOILED.

Instead of boiling three minutes in steaming hot water, as is usually done, put them in one of the metal egg boilers in common use on the breakfast table, or in a covered bowl; cover them with boiling water, and let them stand three minutes; pour this off and refill with more boiling water.

SCRAMBLED.

Put a piece of butter in a frying pan, and when it is hot drop in the eggs, which should be broken whole into a bowl. Stir in with them a little chopped parsley, some pepper and salt, and keep stirring to and fro, up and down, without cessation, for three minutes. Turn out at once into a hot dish, or upon buttered toast, and eat without delay.

MILK OMELET.

Take a tablespoonful of milk for each egg used, beat the eggs separately, very light; add butter and salt to taste; mix all together; turn into a buttered skillet and stir constantly until done, which will be in a few minutes.

EGG CROQUETTES.

Hard boil eight eggs and when cold chop very fine; mix in them one tablespoonful of butter, one teacupful of bread crumbs, one teacupful of milk, one teaspoonful of onion, chopped fine; make a white sauce with the butter and milk, thickened with a little flour; mix all together and mould; roll in cracker crumbs and bake.

SCRAMBLED BRAINS.

One pint or tray of brains; wash thoroughly and free them from all membranes, and sprinkle with salt and pepper; drop the brains in a spider on two tablespoonfuls of butter and stir constantly. When half cooked add from three to six eggs, slightly beaten, and continue to stir until done.

EGGS WITH TOAST.

Cut bread in squares and toast a light brown; poach eggs nicely, place each one on a piece of toast, pour melted butter over them and serve.

STUFFED EGGS.

Boil six eggs very hard, peel them, and after having sliced a bit off each end to make them stand well, cut in halves and extract the yolks. Rub up the yolks with a little pepper and salt, melted butter, bread crumbs and finely chopped celery; fill in the whites nicely, stand on end in a pan, lay bits of butter on each egg and bake.

HAM AND EGG PUDDING.

Six eggs, beaten light; a light pint of flour, a pint of milk, a small piece of butter, salt and pepper to taste. Sprinkle some slices of boiled ham with pepper and lay them in a deep dish that has been greased; then pour the pudding batter over the bacon and bake quickly.

BILL OF FARE FOR THE SPRING.

When the sun begins to grow warm in April, we begin to lose our appetite for meat and solid food, in general, and crave something light and delicate. As cheap as sugar is, and as plentiful as eggs are, at this season, I think a housekeeper may readily indulge her family in desserts during the spring.

A bread pudding is a very nice and convenient thing to have. Take a half dozen cold rolls, or slices of light bread, break them up into crumbs, rejecting the crust, if it is at all hard. Put these crumbs to soak in a quart of fresh, sweet milk, immediately after breakfast, and they will be perfectly soft by the time you are ready to bake the pudding. Add two or three eggs, a heaping tablespoonful of butter, a cup and a half of white sugar, and a cup of raisins or currants, if you have them. Flavor with either vanilla, cinnamon, or nutmeg, and bake a light brown.

Rice pudding, too, is a great help in the spring, and is very nice, with the ingredients above directed for bread pudding. Rice cakes are

also very nice, served with sauce or molasses. Take cold rice, left from dinner, add a pint of flour, a couple of eggs, and enough sweet milk to make a batter. Fry it in cakes, and it makes a nice, simple dessert.

Waffles make a very good dessert, also, served with sauce.

Lemon mush pudding is an inexpensive and palatable dessert, the recipe for which I subjoin: one quart of mush, one-fourth pound of butter, to be put into the mush while warm, four or five eggs, beaten light, the juice and grated rind of two lemons. Sweeten to the taste and bake in pie crust.

Sponge cake roll is a very nice dessert for the spring time, and is made as follows: Make up your batter as for ordinary sponge cake, but instead of baking it in a mould, bake it in a large biscuit pan, thoroughly greased. Pour in enough batter to cover the pan, about half an inch deep, before baking. Bake it carefully, so as not to burn either side. Wring a towel out in hot water, lay it on a board or table, turn the cake out on it, spread it, while warm, with fruit jelly, and roll it up in the towel, like a valise pudding, pinning the towel around it to keep it in shape till dinner time. Serve it either cold or hot, with wine or lemon sauce. Bananas, cut thin, and sprinkled heavily with sugar, make a nice filling for this pudding.

Baked custard is a delicate, old-fashioned dessert, which seems to be coming in vogue again, and it suits very well to have it, now that eggs are abundant. The following is an excellent recipe for making it: Boil a quart of fresh, sweet milk, flavored with cinnamon or vanilla. After boiling, let it cool, sweeten it to your taste, add the yolks of eight eggs and whites of four. Strain it, pour it in cups (yellow earthenware ones that are intended for cookery), put them in a baking-pan, pour boiling water around them and set them in the stove to bake which will require about ten minutes.

We do not only desire sweets in the spring time, but we also feel the need of something acid, and this is a wise provision of nature, as the liver is apt to be torpid in the spring, and acids stimulate it. I think a housekeeper ought always to have a little pickle or catsup on her table, at this season. Lettuce, seasoned as a salad, is very appetizing for a spring dinner, and canned tomatoes served raw, with salad flavoring, are very palatable, when the first warm spell affects us with lassitude. If you have any fragments of cold veal or lamb left over from dinner, you can make an extremely palatable salad of it for supper, chopping or grinding up the fragments, adding an equal amount of chopped-up potatoes, and flavoring with salt, pepper, finely minced onion, celery seed, and a little vinegar. You can also make nice croquets of any fragments you may have, of veal, beef, lamb or cold chicken, adding one-third part of stale bread crumbs, and frying in cakes, like sausage. By the way, a sausage machine is an indispensable adjunct for preparing meats nicely for croquets.

There is no choicer delicacy in the spring than asparagus, and every thrifty farmer ought to provide a bountiful supply of this. In a forward spring, it is ready for use by the 10th of April, in this latitude, and affords a delightful variety in our fare. Kale, too, ought to be sown in time to yield by the last of winter, or early in the spring. Amongst its other recommendations, it enjoys that of being exceedingly hardy, it having survived all the rigors of our late severe winter, and being now in a flourishing condition in the writer's vicinity.

MEATS.

TO CURE LARD.

As soon as it is taken from the hog, cut in small pieces, wash clean, press out the water, and put in the pot to boil, with one gallon of water to a vessel holding four gallons. Boil briskly until nearly done, or until the cracklins begin to brown, then cook slowly to prevent burning. The cracklins should be of a light brown and crisp, and will sink to the bottom when done. This is leaf lard.

The fat off the backbone is also very nice, done in the same way, and does not require soaking, unless bloody. The fat from the entrails can also be made into nice lard by soaking for a day or two in fresh water, changing it frequently, and throwing a handful of salt in the tub of water to draw out the blood and impurities. When ready to render, wash in warm water twice and boil in more water than you do for leaf lard. The cracklins will not become crisp, but remain soft, and will sink to the bottom; they are used for making soap.

VIRGINIA MODE OF CURING HAMS.

Put one teaspoonful saltpeter on the fleshy side of each ham. Salt (not too heavily) for five weeks; if the weather is freezing cold, six weeks; then brush the hams well, and rub them with hickory ashes; let them lie for one week, then hang and smoke them for six weeks with green hickory chips. After brushing, pack them in hickory ashes in a bulk.

TO CURE BACON.

Pack the meat in salt and allow it to remain five weeks. Then take the hams up, wash off, and wipe dry. Have some sacks made of about seven-eighths shirting, large enough to hold the hams and tie above the hock. Make a pot of sizing of equal portions of flour and corn meal, boil until thick, and dip each sack until the outside is well coated with sizing. Put the hams in bags, and tie tight with a strong twine and hang by the same in the smokehouse.

TO COOK A HAM.

Boil the ham three or four hours, according to size; then skin the whole and fit it for the table; then set in the oven for half an hour; cover it thickly with pounded rusk or bread crumbs, and set back for half an hour longer. Boiled ham is always improved by setting it in an oven for nearly half an hour, till much of the fat dries out; and it also makes it more tender.

TO COOK A SADDLE OF MUTTON.

Meats are all better for being kept a day or two before cooking, particularly mutton. If the mutton be tender, do not boil it, but put it in a pan of water, set it on the stove and cook slowly, basting constantly with the gravy or water in the pan; with pepper and salt to taste. Just before it is done, put some scraped horseradish over it, and garnish the dish with the same; add a little ground mustard and grated bread or cracker; pour the gravy over it, and grate bread over, and set it aside to cool. This is for cold mutton. All meats are better for roasting before a fire than in a stove.

ROAST MUTTON.

A very agreeable way of roasting mutton is to dress it as venison. Take a leg of mutton and keep it several days; prepare a dressing of bread crumbs, salt, pepper and summer herbs; making incisions in the mutton, fill them with the dressing, score the upper side, sprinkle salt, pepper and flour on it, and rub with butter. In the first quarter of an hour keep it in a strong heat; baste it often.

BEEFSTEAK SMOTHERED WITH ONIONS.

Cut up six onions very fine; put them in a saucepan with two cupfuls of hot water, about two ounces of good butter, some pepper and salt; dredge in flour. Let it stew until the onions are quite soft; then have the steak broiled, put into the saucepan with the onions; then simmer about ten minutes, and send to the table very hot.

BEEFSTEAK BROILED.

Cut the steak one-half inch thick; it should then be beaten with a steak beater or pestle. The griddle should be hot and on the coals; place the steak on the griddle, and as soon as seared, turn it; when both sides are seared, place it in a pan, season it with pepper, salt and butter; repeat this for every piece of steak, and place in the pan, which should be kept closely covered without being on the fire. If your heat is sufficient from three to five minutes is sufficient to cook.

TO ROAST BEEF.

The sirloin is the nicest for the purpose. Plunge the beef in boiling water and boil for thirty minutes; then put it in the stove pan; skim the top of the water in which it has been boiled, and baste the roast, after dredging it with flour; pepper and salt to taste. Baste frequently, and roast till done.

ROAST TURKEY.

Wash nicely in and out. Plunge into boiling water ten minutes. Have ready a dressing of bread crumbs, hard boiled eggs, chopped fine; one tablespoonful butter, minced parsley, thyme and celery. After rubbing the cavity well with salt and pepper, and putting in a slice of pork or bacon, fill with the above dressing. Do the same also to the crop, so as to make the turkey look plump. Rub the turkey well with butter and sprinkle salt and pepper over it. Dredge with flour. Lay in the pan with a slice of pork or bacon and a pint of boiling water. Lay the liver and gizzard in the pan with it. Put in a hot oven, basting and turning frequently till every part is a beautiful brown. When the meat is amber color, pin a buttered sheet of writing paper over it to keep it from becoming hard and dry. Cook three or four hours. Season the gravy with minced parsley and celery and serve with cranberry sauce.

CHICKENS.

These, whether for boiling or roasting, should have a dressing prepared as for turkeys. Six spoonfuls of rice boiled with the chickens will cause them to look white. If the water is cold when they are put in, they

will be less liable to break. They are improved by boiling a little salt pork with them. If not thus boiled they will need salt.

For broiling, chickens should be split, the inwards taken out and the chickens then washed. Broil very slowly till done, placing the bony side down; then turn it and brown the other side. Forty minutes is the medium time for broiling a chicken.

For roast chicken, boil the gizzard and liver by themselves, and use the water for gravy.

FRIED CHICKEN.

Kill the chicken the night before, if you can, and lay on ice, or else kill early in the morning. When ready, wipe dry, flour it, add pepper and salt and dry in a little lard. When nearly done, pour off the lard, add one-half teacup water, large spoonful butter and some chopped parsley. Brown nicely and serve. Meal mush fried is nice with the chicken.

BAKED HASH.

Take cold beef or veal, chop the meat very fine, put it in a pan with some water; add salt, pepper, butter and bread crumbs to taste. Season with a little chopped onion, parsley and thyme, all minced fine; half a cup of milk or cream, with one egg beaten. Grate some crumbs over the top and bake till brown.

OYSTERS.

FRIED.

Select the largest and plumpest. Drain and spread on a cloth. Beat very light two or three eggs. Dip the oyster first in egg, then in rolled cracker. Have the butter perfectly hot and enough in the pan to cover the oysters. Lay them in, and when brown turn and brown the other side.

SCALLOPED.

Butter a baking dish well, and throw bread crumbs over it until they adhere on all sides; cover the bottom of the dish with oysters, sprinkle on bread crumbs, season with pepper, salt and butter; then another layer of oysters covered in the same way, until the dish is full. Cover the last layer rather more thickly with crumbs and bake a nice brown. Lobster and fish scallops may be prepared in the same manner, using cold boiled lobster or fish.

STEWED.

Drain the liquor from two quarts of firm, plump oysters; mix with it a small teacupful of hot water, add a little salt and pepper and set over the fire in a saucepan. When it comes to a boil add a large cupful of rich milk. (Cream is better.) Let it boil up once, put in the oysters, and let them boil five minutes or less—not more. When they ruffle add two tablespoonfuls of butter, and the instant it is melted and well stirred in take the saucepan from the fire. Oysters become tough when cooked too long.

SAUCES.

SAUCE GOOD FOR ALL PUDDINGS.

Three-quarters of a cup of butter, one and a half cups of sugar, one egg, juice and grated rind of a lemon; all beaten well together. Just before serving pour on the beaten mixture one pint of boiling water.

WINE SAUCE.

One tablespoonful of flour mixed smooth in half a pint of cold water; boil this until it thickens, stirring it all the time; pour it over half a pound of sugar; one-quarter of a pound of butter, a grated nutmeg, and add a glass of wine.

HARD SAUCE.

Beat to a cream one cup butter, to which add three cups powdered sugar. Beat long and hard; then place it upon a small dish and smooth into shape with a knife-blade dipped in cold water. It is made richer by having half a cup of wine, or the juice of a lemon, or both, beaten up with it. When smooth, grate nutmeg thickly on the top.

MISCELLANEOUS RECIPES.

BOILED CUSTARD.

One quart of milk, eight eggs, omitting the whites of four; then strain it. Add eight or ten drops of vanilla.

Make a custard, and when it is done and quite cool put it into a deep glass dish; beat to a stiff froth the whites of four eggs that have been omitted in the custard, adding eight or ten drops of lemon; drop the froth in balls on the top of the custard.

GELATINE.

One box of Cox's gelatine, two cups loaf sugar, two cups cold water, juice and grated peel of two lemons, a pinch of nutmeg, and the same of cinnamon, four cups boiling water, two wineglasses of clear wine. Soak the gelatine in the cold water for two hours. Put it into a bowl with the sugar, lemon juice, nutmeg and cinnamon. Pour the boiling water over these and stir until the gelatine is dissolved; add the wine and strain through a flannel bag.

PINEAPPLE SHERBET.

Dissolve one box of gelatine in one gallon of water; add to this two cans of pineapple, cut fine; the juice of four oranges and two lemons. Sweeten to taste and freeze.

BRANDY PEACHES.

Lay the peaches in strong pearlsh water, boiling until the skins are loose; then put them in cold water, rub the skins off, put them on dishes to cool. To one pound peaches add one-half pound sugar. Make the syrup, and boil the peaches in it for three-quarters of an hour. Put the peaches in jars and add to the syrup equal quantities of brandy and alcohol.

STRAWBERRY CREAM.

Four quarts thick sweet cream, four quarts strawberries. The berries must be mashed or bruised, caps and all, with a teacup of granulated sugar to each quart. After standing several hours strain through a thin, coarse cloth. Put four teacups of white sugar to the cream and then add the juice of the berries. Whip or froth the cream with a patent egg-whip or common egg-beater. Pour two-thirds of the cream into the freezer, reserving the rest to pour in after it begins to freeze. Raspberry cream may be made by the same recipe.

PEACH CREAM.

Take nice, soft peaches, perfectly ripe. Pare and chop fine, make them very sweet, and mash to a fine jam. To each quart of peaches add one pint of cream and one pint of rich milk. Mix well and freeze. If you cannot get cream, melt an ounce of Cox's gelatine in a cup of water. Boil the milk, pour it on the gelatine, and when cold mix with the peaches.

CHICKEN SALAD.

The white meat of a cold boiled or roasted chicken (or turkey). Three-quarters the same bulk of chopped celery, two hard-boiled eggs, one raw egg well beaten, one teaspoonful salt, one of pepper one of made mustard, three of salad oil, two of white sugar, half a teacup of vinegar. Mince the meat well, removing every scrap of fat, gristle and skin; cut the celery into bits half an inch long, or less; mix them and set aside in a cold place while you prepare the dressing. Rub the yolks of the eggs to a finewhite, add the salt, pepper and sugar, then the oil, grinding hard, and putting in but a few drops at a time. The mustard comes next, and let all stand together while you whip the raw egg to a froth. Beat this into the dressing and pour in the vinegar, spoonful by spoonful, whipping the dressing well as you do it. Sprinkle a little salt over the meat and celery, toss it up lightly with a single fork, pour the dressing over it, tossing and mixing until the bottom is as well saturated as the top; turn into the salad bowl and garnish with white of eggs (boiled hard) cut into rings and flowers, and sprigs of bleached celery tops.

MAYONNAISE DRESSING.

Take the yolk of one egg in a large bowl and stir it with the right hand, pouring in with the left not more than a teaspoonful at a time of olive oil until you have used half a tumbler; this will make a thick batter. Into the tumbler which contained the oil put half a wineglass of vinegar, a small teaspoonful of mustard and an even teaspoonful of salt; also a dusting of cayenne pepper, very small; mix these thoroughly and add slowly to the oil batter, stirring all the time. When much salad is used in a family it is well to make double or treble this quantity, which, if closely covered and kept in a cool place will keep for weeks.

SALAD DRESSING (which will keep).

Yolks of four eggs, four teaspoonfuls salt, four mustardspoonfuls yellow mustard, a small cup each of milk and vinegar, a pinch of cayenne pepper, a little sugar, one tablespoonful of butter mixed with a teaspoonful of flour; mix all together and stir over the fire until it boils.

POTATO SALAD.

Four large potatoes; boil with the skin on, peel and slice thin; add one bunch of celery chopped fine, two small raw onions, chopped fine. Mix all together, and when cold add pepper, salt, oil and vinegar to the taste.

POTATO CROQUETTES.

To every cupful of mashed potato, allow a tablespoonful of melted butter, and beat to a cream, seasoning with pepper and salt. Beat up two or three eggs, according to the quantity used, and add this to the potato, with some minced parsley. Roll into oval balls, dip first into beaten egg, then in bread crumbs, and fry in hot lard.

TOMATO CATSUP.

Slice the tomatoes, and boil a short time. Rub them through a sieve, or strain through thin muslin. Salt to taste. To each gallon of juice, add one tablespoonful of ground cloves, one of allspice, one of cinnamon, two of mustard, one of black pepper, and some grated horseradish; boil it an hour and a half, stirring it often. Set it to cool, then add one pint and half of good vinegar. Bottle it, sealing it close. Put the spices in just before it is done boiling.

PICKLED CHERRIES.

To every pound of cherries, allow a half a pound of loaf sugar, half a pint of good cider vinegar, half an ounce each of powdered cinnamon, mixed whole cloves and allspice, and a few blades of mace. Put the cherries in a jar. Boil the other ingredients five minutes in the vinegar, and when boiling, pour the liquor over the fruit. Cover closely for a week before eating.

GREEN TOMATO PICKLE.

Slice green tomatoes and onions, sprinkle each layer with salt, let them stand until next day, then press all the juice out, and season very highly with red and black pepper, celery, mustard seed, a little turmeric, and some sugar; cover with vinegar, and cook until tender.

PICKLED CUCUMBERS.

Half gallon vinegar, three pounds brown sugar, two tablespoonfuls cloves, two tablespoonfuls allspice, two tablespoonfuls mustard, two tablespoonfuls celery, one tablespoonful of white ginger, one tablespoonful cinnamon, one tablespoonful black pepper, two pods green pepper, four lemons sliced, a little horseradish, twelve onions, and as many cucumbers as the vinegar will well cover. Boil all together until the cucumbers are tender, and they will be ready for use in a week or so. To green the fruit: line your brass kettle with grape leaves, and then pour weak vinegar on the cucumbers, cover with leaves, and boil a little while.

TOMATO CATSUP.

Put into a preserving kettle about one pint of water, fill up the kettle with ripe red tomatoes, previously washed and picked, with the skins on; cover closely, and set on a hot fire, frequently stirring that they

may not stick to the bottom. Boil about one hour. Turn into a wooden tray: when cool enough, rub through a coarse sieve, through which neither skin nor seed can pass. Measure five quarts of this pulp, and boil until very thick, then add two tablespoonfuls horseradish, two tablespoonfuls white mustard seed, two tablespoonfuls celery seed, two tablespoonfuls black pepper beaten fine, two or three races of ginger beaten fine, three or four onions chopped fine, a little garlic, one nutmeg, salt and sugar to the taste. Stir all in, and let it come to a boil. Pour in one quart of strong cider vinegar. Let it boil up once more, and take off the fire. Bottle, cork, and seal.

GRAPE JELLY.

Mash well the berries with the hands, so as to remove the skins; pour all into a preserving kettle, and cook slowly a few minutes to extract all the juice; strain through a colander, and then through a flannel jelly-bag, keeping as hot as possible; for if not allowed to become very cool before putting again on the stove, the jelly comes much quicker. Measure the juice, allowing a pound of loaf sugar to every pint of juice, and boil fast for at least half an hour. Try a little, and if it seems done, remove and put into glasses.

HOME-MADE CANDIES.

COCOANUT CARAMELS.

Three pounds of light brown sugar, one large cocoanut, grated, one cup of rich milk, or cream; mix the milk and sugar, put on the fire to dissolve, then add the cocoanut, and stir constantly for about a half-hour, or until it will harden when dropped in water. Pour in buttered dishes and cut in squares.

CREAM CHOCOLATES.

Three cups of pulverized sugar, one cup of soft water, two tablespoonfuls of cornstarch, one tablespoonful of butter. Wash from the butter every grain of salt; stir the sugar and water together; mix in the cornstarch; bring to a boil, stirring constantly; boil about ten minutes. Take from the stove and beat as you would eggs until it begins to look like granulated cream; put in about a teaspoonful and a half of vanilla. Make into balls and lay in a dish to harden. I merely melt my chocolate—half-cake of Baker's—and throw the balls in it. Some add a little sugar to the chocolate and beat smooth, and then throw in the balls.

CARAMELS.

Three pounds of brown sugar, half-pound of chocolate, half-pound of butter, one cup of cream, two tablespoonfuls of molasses, one tablespoonful of vanilla. Boil twenty-five minutes. Do not stir while boiling.

MOLASSES CANDY.

Two cups Puerto Rico molasses, two-thirds cup sugar, three tablespoons butter, one tablespoon vinegar. Put butter in kettle, and when melted, add sugar and molasses. Add vinegar just before taking from

fire. To make velvet molasses candy, take one cup of molasses, three cups sugar, one cup boiling water, three tablespoons vinegar, one-half teaspoon cream tartar, one-half cup melted butter, one-fourth teaspoon soda. Pour first four ingredients in kettle placed over front of range. As soon as boiling point is reached, add cream tartar. Boil until, when tried in cold water, mixture will become brittle. Stir constantly during last part of cooking. When nearly done add butter and soda. Pour into a buttered pan and pull same as molasses candy. While pulling, add one tablespoon vanilla, one-half teaspoon lemon extract, or a few drops oil of peppermint or wintergreen.

ICE CREAM CANDY.

Three cups sugar, one-fourth teaspoon cream tartar, one-half cup boiling water, one-fourth tablespoon vinegar. Boil ingredients together without stirring, until, when tried in cold water, mixture will become brittle. Turn on a well-buttered platter to cool. As edges cool, fold toward the center. As soon as it can be handled, pull until white and glossy. While pulling, flavor as desired, or add melted chocolate. Cut in sticks or small pieces.

VINEGAR CANDY.

Two cups sugar, one-half cup vinegar, two tablespoons butter. Put butter into kettle; when melted, add sugar and vinegar. Stir until sugar is dissolved, afterward occasionally. Boil until, when tried in cold water, mixture will become brittle. Turn on a buttered platter to cool. Pull and cut same as molasses candy.

PEPPERMINT DROPS.

Three cups sugar, one cup water, six drops oil of peppermint. Boil ten minutes; beat until cool and drop on marble slab. Milk can be used instead of water, but boil longer.

SALTED ALMONDS.

Blanch the almonds and sprinkle with salt while damp. Melt a small lump of butter in a baking pan; pour the nuts into the pan and toast in a quick oven.

CORRECT CUP OF COFFEE.

HOW TO MAKE A PERFECT CUP IS AN ART KNOWN 'TO FEW.

How to make a perfect cup of coffee is an art, which in ancient times, if coffee had been known, then, would have been thought to be a gift of the gods.

The chef at one of the big New York hotels, who is noted for the excellence of the coffee he brews, gives this "secret" of his success:

"Good coffee," he says, "and good blends are necessary in all cases where a good cup of coffee is expected.

"Java gives the best satisfaction. The term 'blend' refers to the district from which the article comes—not to the grade. Even the best

of blends may at times lose their character by being under roasted or over roasted.

"Take a granite coffee pot, free from any abrasion where the iron may be exposed to the coffee. The contact of these two is ruinous. This applies to tin pots, too; in fact, where any metal is used and it is exposed to the action of the coffee, or where the bottom of the pot or the surface edges are worn. The vessel should be a drip pot. Whether it be a cloth, china or metal sieve, it is best to have a drip arrangement. A cloth drip or bag or such a percolator as has a cloth attachment is recommended.

"Place in the granite saucepan one heaping tablespoonful of medium-ground coffee for each cup and a half you make. Pour enough hot water on it and stir with a spoon until all the coffee has been moistened. This procedure will take about one minute. In the meantime, the pot must be ready to receive this moistened coffee, which is poured into the percolator or bag. To this is added sufficient boiling water to make the number of cups of coffee to correspond with the spoonfuls of ground coffee used.

"After the coffee has dripped into the pot through the bag, draw the coffee off into another vessel, remove the lid from the top of the pot and pour this coffee through the grounds and let it drip through again. Continue this at least three times, allowing it to fully drip through; then set the coffee pot on your stove, where it is hot enough to have your coffee boil not less than three minutes or more than five.

"After it has boiled, place it in such a position on the stove that it will keep ready for service. Better results are obtained by allowing the coffee to stand in this position at least a half hour before using it.

"For each cup of special coffee wanted, place one teaspoonful of freshly ground coffee in the pot or percolator. Then pour the coffee, which has been drawn off, into the vessel in the pot or percolator, containing the freshly ground beans. Let it drip through and you will find that not only will you have a coffee that is doubly strong, but with the flavor and aroma of the fresh-ground coffee.

TESTIMONIALS.

From a large number of communications we have received, we take pleasure in presenting the following, regretting that want of space will not admit of using many others we have on our files. We thank our patrons for their generous words, and shall endeavor to still merit their esteem and confidence.

Leaksville Woolen Mills.

Dear Sirs: I have received my goods, and am very much pleased with them. I was raised on a farm, and have carded, spun and wove many a yard of cloth in the old-fashioned loom, and know what it costs to make a yard of cloth, and after all that hard labor it was nothing to compare to your cloth. After many years of toil, I set the old loom aside, and decided to sell my wool for cash and buy cloth for my six boys, some of which were then grown. I shipped my wool several years, selling for cash, but after paying freight, commissions, etc., I had very little money. I then decided to send my wool to you, which was five years ago. I was so very much pleased with your goods, I have been having you manufacture my wool every year since, and expect to continue to do so as long as I have sheep. Wishing you much success,

Respectfully yours,

MRS. SAMUEL F. SPENCER, Buckingham, Va.

October 17th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have been sending my wool to you for ten years, and I take great pleasure in saying to the public, "Your Mills have given me perfect satisfaction in all that it has done for me." I have had blankets, dress goods, buggy robes, and can truthfully say some of the richest and loveliest coverlets that my eyes ever beheld. I must say it gives me the greatest pleasure in saying to my friends and the public that it has done all it claimed to do, and without a doubt I shall patronize it as long as we own a sheep and you send us the goods you have. Wishing you great success,

Respectfully,

MRS. J. Z. BOWEN, Oliveville, Va.

November 6th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have received my goods all O. K., and am perfectly satisfied with them. I think them beautiful. I shall be glad to patronize you again next spring. Others in my neighborhood have said they are going to send to you the next clipping season. I will do all I can to get more customers for you. Thanking you for my nice blanket and rug.

Respectfully,

MRS. FRANK THORNTON, Ware Neck.

August 31st, 1899.

Leaksville Woolen Mills.

Dear Sirs: The drugget and rug received. I am highly pleased with everything you have made for me, and shall continue to send all wool to you.

Truly,

MRS. J. C. THOMAS, Raynor, Va.

October 1st, 1899.

Leaksville Woolen Mills.

Dear Sirs: I write to say my goods have been received, and that my wool was made up according to my instruction. We were all very much pleased with the goods, so do not make yourself uneasy any longer about my wool. You have been making up my wool for a good many years—some ten or fifteen, I think—and you have always given satisfaction, except sometimes I thought you were too slow in sending the goods back. May you continue to do work as satisfactory in the future as the past, and I have no doubt you will be a blessing to your customers.

Yours truly,

WM. H. ABBITT, West Appomattox, Va.

September 11th, 1899.

Leaksville Woolen Mills, Leaksville, N. C.

Dear Sirs: I received blankets several days ago, and was very much pleased with them. Will ship you wool as fast as we get any. We haven't but few sheep. Will try and get some of my neighbors to ship.

R. O. ORGAN, Earle, Va.

September 24th, 1899.

Leaksville Woolen Mills.

Gentlemen: The goods arrived O. K. They give entire satisfaction. We think they are beautiful. The exchange plan, as you manage it, is a blessing to any poor man. It pays better to have wool made up on shares than to sell it to the merchants. It enables him to furnish his house with useful, durable and beautiful articles at less than half price, provided he sold his wool and took the money to buy such articles. Yes, sir, it pays a hundred per cent. better. Any man with a few sheep can furnish his house with all the necessities in the woolen cloth line, and all the beautiful rugs, carpets, etc., at almost no cost. Accept thanks. May you live long, prosper, and continue to be a benefactor in the land.

Respectfully,

J. D. GRIFFIN, Hamburg, Ala.

September 28th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have been shipping my wool to Leaksville for several years. Have had cloth, rugs, yarn, buggy robes and counterpanes, all of them made up from my wool, and they are beautiful. All of them are of good quality, and give perfect satisfaction. Glad we have such an opportunity of having our wool worked up so nicely.

GRANDY B. DOXEY,

and wife,

MARY S. DOXEY,

Creeds, Va.

October 3d, 1899.

Leaksville Woolen Mills.

Gents: Goods received and give satisfaction. I have been dealing with your Mills for three or four years, and your goods have always given entire satisfaction as to manufacture, and the promptness with which the orders have been attended to.

Respectfully,

R. LEBBY, M.D., Fort Johnson, S. C.

October 4th, 1899.

Leaksville Woolen Mills.

Dear Sirs: My carpet has arrived, and I am very much pleased with it. It is beautiful. I have been pleased with all the work you have done for me—rugs, blankets, skirts and carpet. You may look for our next clipping of wool another year.

Respectfully,
MRS. S. J. COSTIN, Cheapside, Va.

September 23d, 1899.

Leaksville Woolen Mills.

Dear Sirs: I highly appreciate your turnout this year. My wool was worse with burs and dirt than I ever had it, but I got the best turnout I ever had.

Yours,
TOM MARTIN, Meherrin, Va.

September 26th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I received the goods and am very much pleased with them.

Yours truly,
J. S. KERNACHAN, Florence, Ala.

October 11th, 1899.

Leaksville Woolen Mills.

Dear Sirs: The carpet which you made for us was received yesterday, and we are so well pleased with it that I write at once to express my appreciation for your promptness. My wife is so well pleased with the carpet and work that she says she would not take \$25 for it now. I've had carpet and blankets made at your mills, and have found the work O. K. in every respect. I know of no establishment that puts more brains and money into the texture of the goods it sends out. I can safely recommend your mills to the public. I am well pleased with the carpet, and I don't think I ever saw a prettier pattern in my life. I take great pleasure in testifying to the good quality of all goods received from you in exchange for wool, and also to the courtesy and fairness with which you have always treated me.

Very respectfully,
J. W. WILCOX, Kehukee, N. C.

September 23d, 1899.

Leaksville Woolen Mills.

Dear Sirs: I received my goods. We are well pleased with them, and take pleasure in testifying to your integrity, believing you to be honest, upright gentlemen.

Truly yours,
SARAH A. BARNES, Vicksville, Va.

June 20th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I received a nice pair of blankets in good order. I am well pleased with your work. I've dealt with you two years with much satisfaction. I think I shall continue to deal with you. I get better pay for my wool in this way than any other.

Truly yours,
W. T. MEARS, Bridgetown, Va.

July 15th, 1899.

Leaksville Woolen Mills.

Gentlemen: This will acknowledge receipt of my last and fourth shipment of blankets and robes from your mills; and I take pleasure in stating that in each and every order your work has given entire satisfaction. I shall in the future, as previously, be pleased to call the attention of my friends to your splendid work.

Very respectfully,
MRS. JOHN H. CRAIG, Gastonia, N. C.

Leaksville Woolen Mills.

Dear Sirs: You have been manufacturing for me three years, and I am entirely pleased with your goods. Expect to patronize you again. Wishing you much success,

Truly yours,
FRANK T. JONES, Olden Place, Va.

July 17th, 1899.

Leaksville Woolen Mills.

Dear Sirs: The goods you sent me came all O. K., and I am well pleased with them; also L. J. Kiker is well pleased with his goods.

Yours truly,
JOHN W. KIKER, Diamond Hill, N. C.

August 17th, 1899.

Leaksville Woolen Mills.

Dear Sirs: Your very handsome rugs have been received. I have sent wool to your mills for five years, and am more pleased each year with the goods sent me.

Respectfully,
JOHN C. BALL, Cordesville, S. C.

July 14th, 1899.

Leaksville Woolen Mills.

Dear Sirs: With pleasure I wish to state to you I received the blankets. I think them very nice—were nicer than I expected, and will with pleasure show them to my friends and neighbors that they may be benefited by my experience, and you may expect to hear from me again after shearing time. With many, many thanks, respectfully,

MRS. M. E. GRIFFIN, Eva, N. C.

September 18th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have received my goods, and will say that I can recommend your work to any and all persons to be first-class in every respect.

Truly, ELIZA A. BAXTER, Currituck, N. C.

July 25th, 1899.

Leaksville Woolen Mills.

Dear Sirs: The goods from your mills in exchange for wool were received to-day. My wife and family are delighted with them, and would not take twice what they cost for them. We will show them to our friends, and recommend your factory with great pleasure.

Truly yours,
REV. S. W. ROBERTS, Newbern, Ala.

June 16th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I was very much pleased with my skirt, and it fits perfectly. It is the nicest I have had. I have recommended Col. McIver's family to send and get skirts. With best wishes,

Sincerely,

MRS. HELEN S. JAMES, Palmetto, S. C.

July 11th, 1899.

Leaksville Woolen Mills.

Dear Sirs: The goods I received in exchange for my wool gave perfect satisfaction, and also Mr. Barnes was highly pleased with his goods. We are ready to do all we can for you at any time.

Sincerely yours,

JACOB BLANCHARD, Vivian, N. C.

July 18th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I write to let you know I received my blankets, and am highly pleased with them. I wish I had a whole drove of sheep so I could send the wool to Leaksville. I can recommend your mill to any one having wool to be cheapest in the state, on account of its easy terms.

Truly yours,

MARY B. MITCHELL, Lodo, N. C.

July 10th, 1899.

Leaksville Woolen Mills.

Dear Sirs: Goods received for wool shipped you, and give entire satisfaction. I have been shipping you wool for twelve or fifteen years, and have always been well pleased with goods received.

Truly yours,

JOHN W. KIKER, Diamond Hill, N. C.

August 17th, 1899.

Leaksville Woolen Mills.

Dear Sirs: My package has arrived, and the goods are satisfactory. The tailor-made skirt fits well and is nicely made. The goods sent are all I would ask.

Yours respectfully,

MRS. JOS. S. JAMES, Selden, Va.

June 27th, 1899.

Leaksville Woolen Mills.

Dear Sirs: Have just received my goods from Leaksville Mills, and find everything so nice and satisfactory that I am obliged to write to acknowledge its reception. I always like all your goods.

Respectfully,

MRS. C. H. MANSON, Ordsburg, Va.

Leaksville Woolen Mills.

Dear Sirs: It affords me a great deal of pleasure to say to you that your work done for me in working up my wool gives me entire satisfaction. Don't think your designs and workmanship can be excelled. Wish-
ing you success, I am,

Very respectfully,

W. F. HARRISON, Gasburg, Va.

August 5th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have just received my goods from your mills from this year's crop of wool. It is now lying on the floor for the family and my neighbors to inspect. We are all highly pleased with the carpets, rugs, etc. I often think what a fool I was not to have patronized you sooner.

Truly yours,

R. B. TURNBULL, Lawrenceville, Va.

June 30th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I write to say I have been doing business with you for ten to twelve years, and have always been entirely satisfied. You have made blankets, carpet, skirts and other goods, and will say I have saved lots of money every time, as your goods always last longer than any I can buy for anything like the money, and can always find ready sale for more than I ever have to sell at a good price. You can always count on my friendship. I am yours, well pleased,

R. D. MABEN, Blackstone, Va.

November 4th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I take pleasure in writing you in regard to the work you did for me. I must say that I am more than pleased with the blankets you made for me.

Truly,

J. W. O'BRIEN, Forbes, Va.

November 7th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have been a patron of your mills for a good many years, and have had blankets, art squares, carpeting and pants goods, all of which I have been highly pleased with, and gladly recommend your mills to all. Will send you all the orders I can.

Truly, MRS. S. J. RAWLINGS, Diamond Grove, Va.

November 9th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I have received my goods, and am entirely pleased with them. Can say you have acted honestly in every respect since I have been sending you my wool.

Yours truly,

LUCY B. SAUNDERS, Turner, Va.

September 1st, 1899.

Leaksville Woolen Mills.

Dear Sirs: The goods arrived last evening from the mills, and I take pleasure in saying they were all more than satisfactory. One would be hard to please that could find any fault with the work you do. I have had from you white and colored blankets, carpet, rugs, art squares, and regard each and all as beyond criticism. I should unhesitatingly advise any one having wool to be made up to send it to the Leaksville Mills. Thanking you for your upright dealing, correctness of detail, and the beautiful work just sent me, I remain, yours respectfully,

MRS. JUDGE T. M. MILLER, Powhatan C. H., Va.

October 6th, 1899.

Leaksville Woolen Mills.

Dear Sirs: Your bundle reached me yesterday, and the goods are beautiful. The ones you made for me last year have been much admired by many people. I will take pleasure in giving your advertising card a conspicuous place. Hoping to have further dealings with you,

Very truly yours,

N. B. COOKE, Taylorsville, Va.

August 25th, 1899.

Leaksville Woolen Mills.

Dear Sir: My cloth came all right, and I was well pleased with it. I was highly pleased with the blankets and the dress goods I received from your factory, and as long as I raise sheep I expect to patronize your mill. I would not be without your blankets for a great deal.

Yours respectfully,

WILLIAM T. CLARK, Meherrin, Va.

September 16th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I am specially pleased with your way of doing business. I am perfectly satisfied with the work you did for me. I can recommend your mills to my friends, as I am highly pleased. I shall ship more wool next season, and will advise my friends to ship their wool to the Leaksville Woolen Mills, N. C., and I am sure they will get entire satisfaction. As I am specially pleased, it affords me pleasure to recommend to others.

Yours respectfully,

W. A. CANNON, Mecklenburg County, Va.

Leaksville Woolen Mills.

Dear Sirs: I received my coverlets all right. I was well pleased with them. I think they are the prettiest I ever saw. I am so well pleased that I will have more next fall. I have recommended your nice work to all of my neighbors. They say they will have coverlets next fall.

Truly yours,

MARY C. DAVIS.

Leaksville Woolen Mills.

Dear Sirs: I take pleasure in notifying you that I have received goods ordered, and I am pleased beyond expectation with the beauty and quality of carpet and blankets. I also wish to thank you for promptness in filling my order.

Respectfully,

MRS. WM. F. JONES, Lawrenceville, Va.

November 3d, 1899.

Leaksville Woolen Mills.

Dear Sirs: It is with much pleasure that I write to tell you that I have received my goods O.K., and am entirely pleased with them. I got more than I expected. I show my goods and my beautiful blankets and coverlets that I have gotten from year to year for a long time to my friends. Think I have been instrumental in several sending their wool to you. Wishing you great success,

I am most respectfully,

MRS. E. C. GEE, Lockleven, Va.

October 26th, 1899.

Leaksville Woolen Mills.

Dear Sirs: My goods arrived last night. I was never more pleased at the contents of any package in my life. I have been dealing with you for two years, and find you just in every sense. Heartily will I recommend you to all. Wishing you much success in the future,

Your friend, SAMUEL G. WEBB, Chuckatuck, Va.

Leaksville Woolen Mills.

Dear Sirs: I have been patronizing your mills for three years, and your goods have always proved satisfactory, and I expect to continue patronizing you as long as you do satisfactory work. We are also much pleased with your prompt returns.

Yours truly,
W. S. DUNCAN, Cartersville, Va.

September 18th, 1899.

Leaksville Woolen Mills.

Dear Sirs: I write to say the goods gave perfect satisfaction, even better than in previous years.

Yours truly,
C. A. SLOOP.

Leaksville Woolen Mills.

Dear Sirs: I write to state that our blankets have been received in nice order, and to say the least, they are beautiful. Our transactions with you have been very satisfactory, and we have been specially pleased with such articles received from you in exchange for our wool. We have been dealing with you for several years, and no one could have given us better satisfaction. We shall deal with you in the future, feeling that you will do all in your power to please us.

Yours truly, R. B. STORY, Newsom's, Va.
October 10th, 1899.

Leaksville Woolen Mills.

Dear Sirs: The goods manufactured by you received in splendid condition, giving full and entire satisfaction in every particular. I have never seen more beautiful workmanship or handled finer texture. Your enterprise I esteem as a blessing to the country, and most heartily recommend the Leaksville Mills to all who want first-grade goods, and the managers of the same for their upright, honest dealing. Farmers, raise sheep, patronize and encourage this enterprise, and declare war against cut-tail curs.

Respectfully,
ROBERT P. JAMES, Croaker, Va.

INTEREST RULES.

For finding the interest on any principal for any number of days, the answer in each case being in cents, separate the two right hand figures of answer to express dollars and cents:

4 per cent.—Multiply the principal by the number of days to run; separate right hand figure from product and divide by 9.

5 per cent.—Multiply by number of days and divide by 72.

6 per cent.—Multiply by number of days, separate right hand figure and divide by 6.

8 per cent.—Multiply by number of days and divide by 45.

9 per cent.—Multiply by number of days, separate right hand figure and divide by 4.

10 per cent.—Multiply by number of days and divide by 36.

12 per cent.—Multiply by number of days, separate right hand figure and divide by 3.

15 per cent.—Multiply by number of days and divide by 24.

18 per cent.—Multiply by number of days, separate right hand figure and divide by 2.

20 per cent.—Multiply by number of days and divide by 18.

WEIGHT OF THE STATUTORY BUSHEL.

(Minimum weight by U. S. Statute).

Apples, dried	per bushel, 26 lbs.	Lime, unslacked	per bushel, 30 lbs.
Barley	48 "	Malt	38 "
Beans, castor	46 "	Millet Seed	50 "
Beans, white	60 "	Oats	32 "
Bluegrass seed	44 "	Onions	57 "
Bran	20 "	Peaches, dried	33 "
Buckwheat	48 "	Peas	60 "
Clover Seed	60 "	Peas, ground (pea-meal)	24 "
Coal	80 "	Potatoes, Irish	60 "
Corn, shelled	56 "	Potatoes, sweet	55 "
Corn, in the ear	70 "	Rye	56 "
Corn-meal	48 "	Salt, fine	167 "
Flaxseed	56 "	Salt, coarse	151 "
Hair, plastering	8 "	Timothy Seed	45 "
Hempseed	44 "	Turnips	55 "
Hungarian-grass seed	50 "	Wheat	60 "

A SHORT TABLE OF CAPACITIES.

1828 solid inches make 1 bushel unslacked lime, coal or coke.

A box 14x14x13 $\frac{3}{4}$ inches in the clear holds 1 bushel.

A box 14x7x13 $\frac{3}{4}$ inches in the clear holds $\frac{1}{2}$ bushel.

A box 7x7x13 $\frac{3}{4}$ inches in the clear holds 1 peck.

A bucket or other cylindrical vessel 7 inches in diameter and 6 inches deep holds one gallon, wine measure, and a similar vessel 7 inches in diameter and 7 $\frac{1}{3}$ inches deep holds 1 gallon, beer measure.

LATIN PHRASES IN FREQUENT USE.

Ad libitum.—At pleasure.

Ad valorem.—According to value.

A fortiori.—With strong cause.

A posteriori.—From effect to cause.

A priori.—From cause to effect.

Certiorari.—To be made more certain.
Contra bonos mores.—Against good morals.
Fiat justitia ruat coelum.—Let justice be done though the heavens should fall.
i. c.—That is.
Ipso facto.—By the act itself.
Mandamas.—A royal command.
Ne sutor ultra crepidam.—Let not the shoemaker go beyond his last.
Nisi prius.—Unless sooner.
Nolle pros.—Not willing to prosecute.
Non sequitur.—It does not follow.
Prima facie.—At first view.
Sic itur ad astra.—Thus is the road to immortality.
Suaviter in modo.—Gentleness in manner.
Summum bonum.—The highest good.
Suppressio veri.—Suppression of the truth.
Suum cuique.—Let every one have his own.
Tria juncta in uno.—Three in one.
Uti possidetis.—As you now possess.
Vade mecum.—Go with me.
Vi et armis.—By force.
Viva voce.—By word of mouth.

TITLES OF WEDDING ANNIVERSARIES.

First anniversary—The cotton wedding.	Fifteenth anniversary—The glass wedding.
Second anniversary—The paper wedding.	Twentieth anniversary—The china wedding.
Third anniversary—The leather wedding.	Twenty-fifth anniversary—The silver wedding.
Fifth anniversary—The wooden wedding.	Fiftieth anniversary—The golden wedding.
Seventh anniversary—The woolen wedding.	Seventy-fifth anniversary—The diamond wedding.
Tenth anniversary—The tin wedding.	
Twelfth anniversary—The silken wedding.	

LITTLE TIPS FOR HOUSEKEEPERS.

Fish may be scaled much easier by first dipping them into boiling water for a minute.

Fresh meat beginning to sour will sweeten if placed out of door in the cool air over night.

Boiling starch is much improved by the addition of sperm or salt, or both, or a little gum arabic dissolved.

A tablespoonful of turpentine boiled with your white clothes will greatly aid the whitening process.

Kerosene oil will soften boots and shoes that have been hardened by water.

Thoroughly wetting the hair once or twice with a solution of salt and water will keep it from falling out.

Salt fish are quickest and best freshened by soaking in sour milk.

One teaspoonful of ammonia to a teacup of water, applied with a rag, will clean silver or gold jewelry perfectly.

Salt will curdle new milk, hence, in preparing porridge, gravies, etc., salt should not be added until the dish is prepared.

Paint stains that are dry and old may be removed from cotton or woolen goods with chloroform.

Clear boiling water will remove tea stains; pour the water through the stain, and thus prevent its spreading over the fabric.

THE LONGEST DAY.

At Stockholm, Sweden, the longest day is eighteen and one-half hours.

At Spitzbergen the longest day is three and one-half months.

At London, England, and Bremen, Prussia, the longest day has sixteen and one-half hours.

At Hamburg, in Germany, and Dantzig, in Prussia, the longest day has seventeen hours.

At Wardbury, Norway, the longest day lasts from May 21st to July 22d, without interruption.

At St. Petersburg, Russia, and Tobolsk, Siberia, the longest day is nineteen hours, and the shortest five hours.

At Tornea, Finland, June 21st brings a day nearly twenty-two hours long, and Christmas one less than three hours in length.

At New York the longest day is about fifteen hours, and at Montreal, Canada, it is sixteen hours.

HINTS FOR THE HOUSEWIFE.

The finest grained beef is the best. The fat should be a pale cream color, not yellow.

The lean of mutton should be red and the fat white.

In choice poultry the breast is broad, the feet pliable, and toes easily broken.

Fresh fish have bright eyes and red gills.

A little gum arabic and common soda added to starch makes shirt bosoms glossy.

Magnesia will remove grease spots from silk or cloth if well rubbed in, and after standing awhile apply soft brown paper to the wrong side and press with a warm iron.

To keep white hands—dip them in lemon juice or vinegar-water immediately after they have been in soap suds.

Hair brushes can be washed without being made stiff by putting a little soda into the boiling water, using cold water to rinse them in.

Hoarseness will be instantly relieved by the free use of horse-radish.

To cure hiccoughs hold the breath as long as possible; or drink as many mouthfuls of water as possible.

IN CASE OF ACCIDENT.

HANDY HELPS IN EMERGENCIES WHILE WAITING FOR A DOCTOR.

For Burns.—Linseed oil and lime water give prompt relief. If this is not at hand any simple ointment may be used.

For Cinders in the Eye—Curl a strip of soft paper into a pencil, moisten the end, and turning up the eye lid, the cinder may be removed without difficulty.

For Bruises—Lay a cloth over the injured part which should be kept moist by trickling water.

For Bleeding—Apply pressure. If the bleeding is profuse, use a tourniquet which can be made with a bit of cord, twisting it tightly by means of a stick. For nose bleed, plug the nostrils with cotton saturated with gum arabic water.

For Choking—Press upon the root of the tongue so as to produce vomiting.

For Drowning—Restore circulation and respiration by lifting the arms above the head, and then lowering them. Rub the body and put it in warm blankets. Give wine or brandy when the patient shows signs of life.

For Suffocation—Throw cold water in the face; open all windows and doors; try to promote respiration; put the feet in hot water.

TO JUDGE A HORSE.

A horse's age is best shown by his teeth. At three years old he sheds one or more on each side of the central teeth. At four he drops the two corner ones. Between four and five he cuts the under teeth. At five he cuts the upper ones. At nine the teeth begin to show wear.

A horse that is broad between the eyes is most intelligent and most easily trained.

A light sorrel or chestnut horse with white marks upon him is usually gentle.

White horses are most susceptible to cold.

Black horses are usually the first to succumb to heat.

As a rule parti-colored horses are docile and safe.

A liberal bran mash given every night is good for a horse troubled with heaves.

LITTLE HINTS ON COLOR AND DRESS.

The blonde may wear any of the neutral tints, such as drab, russet and brown.

Dark violet shading off into a lighter tints goes well with golden hair.

Green or any of its shades becomes most blondes. Very light blondes look particularly well in Nile green and the kindred shades.

As a rule blondes may wear any color except reds.

Brunettes look best in scarlet, yellow, orange and such striking tints, but they may also wear white or black effectively.

Dark green also sets off a brunette's complexion finely.

The colors in a costume should harmonize. Black and orange accord well; also black and white; black and maize; black and scarlet; black and slate color; black, navy blue and yellow.

Blue goes with gold, orange, salmon, drab, white, gray, chestnut, black and brown.

Red goes with gold, green, orange, yellow, black and white.

Purple goes with gold, orange, and maize.

Crimson goes with orange, purple, maize, black and drab.

The dress should always suit the occasion.

Too many rings make a hand unsightly however fair it be.

Diamonds are not for young ladies, save on special occasions.

Pearls and opals are in good taste for young ladies.

Young women should never accept gifts of value except from those to whom they are betrothed.

Undergarments should not be elaborately trimmed.

Garters too tightly worn are apt to cause varicose veins.

Garters worn below the knee spoil the shape of the limb.

Unlaundered clothing requires frequent airing.

HINTS ON GOOD LOOKS.

A soft flannel face cloth is best.

In washing the face press it with the cloth, don't rub it.

Cold cream thinly applied is good to prevent chapping.

A recipe for wrinkles: Alcohol 12 grammes; tincture of benzoin 2 grammes; judea balsam 5 drops; liquid storax 2 drops. A few drops of this compound in a glass of water makes a good face lotion at bed time. Let it dry on.

Eat fruit plentifully to have a good complexion.

Biting the lips spoils their appearance.

Olive oil is good to freshen the lips and improve their color.

Powdered charcoal applied with a brush not too hard is an excellent whitener for the teeth.

Over sleeping is as bad as over eating for those inclined to corpulence.

Hair that tends to become thin should be frequently clipped on the ends.

Trim the eyebrows every few weeks. It helps their growth.

A pinch of borax in water makes a good eye wash.

Slippers without heels are bad for the shape of the feet.

Much sea bathing roughens the complexion.

Bran and oatmeal are both useful to whiten the hands.

Powdered oris root is good to disguise the odor of perspiration.

The proper length for finger nails is just level with the finger tips.

POINTS IN ETIQUETTE.

A young lady should not shake hands with a gentleman on being introduced.

A lady or gentleman entering a room should be announced in a moderate tone of voice.

In introductions pronounce names clearly.

Every visiting card received demands the recognition of a return card.

Introductions require prompt answers.

It is always the lady's place to first recognize the gentleman.

It is no longer thought necessary for gentlemen to remove their hats in elevators in deference to ladies.

It is bad manners to come late to a public performance or to go early.

RULES FOR SMOKING.

Never smoke in the presence of ladies without permission.

Don't smoke before breakfast, especially if you find you are smoking more than you ought to.

Smoke leisurely. Half the good of a cigar is lost when you go at it vigorously as if it were a task.

Don't light a cigar on one edge. See that it is lighted all round. A cigar is like a lamp-wick; half the character is in the even lighting.

If your cigar goes out before you have finished it blow the dead smoke out of it or it will be rank when re-lighted.

After dinner or after supper are the best times for smoking, whether from the standpoints of health or enjoyment.

Don't leave "stumps" around on the mantelpiece or the window-sill. Few wives can stand untidiness.

THE LAW OF FINDING.

The law of finding is this: The finder has a clear title against the whole world except the owner. The proprietor of a hotel or a shop may make regulations in regard to lost property which will bind employees, but cannot bind the public. The police have no special rights in regard to articles lost, unless those rights are conferred by statute. Receivers of articles found are trustees for the owner or finder. They have no power in the absence of special statute to keep an article against the finder, any more than the finder has to retain an article against the owner.

BUSINESS LAWS.

If a note is lost or stolen it does not release the maker; he must pay it if the consideration for which it was given and the amount can be proven.

Notes bear interest only when so stated.

Principals are responsible for the acts of their agents.

Each individual in a partnership is responsible for the whole amount of the debts of the firm, except in cases of a special partnership. The word "limited," in connection with a firm name, indicates that a limitation of responsibility for each member is fixed.

Ignorance of the law excuses no one.

An agreement without consideration of value is void.

A note made on a Sunday is void, also one dated ahead of its issue. It may be dated back at pleasure.

Contracts made on Sunday cannot be enforced.

A note by a minor is void in some States, and in others it is voidable on judicial decision.

A contract made with a minor, or a lunatic, is void.

A note obtained by fraud or from a person in a state of intoxication cannot be collected. It is a fraud to conceal a fraud. Signatures made with a lead pencil are good in law. The acts of one partner bind the rest.

"Value received" is usually written in a note, and should be, but it is not necessary. If not written it is presumed by the law or may be supplied by proof.

The maker of an "accommodation" bill or note (one for which he had received no consideration), having lent his name or credit for the benefit of the holder, is not bound to the person accommodated, but is bound to all other parties, precisely as if there was a good consideration.

No consideration is sufficient in law if it be illegal in its nature.

Checks or drafts must be presented for payment without unreasonable delay.

An indorsee has a right of action against all whose names were on the bill when he received it.

If the letter containing a protest of nonpayment be put into the post-office, any miscarriage does not affect the party giving notice.

Notes of protest may be sent either to the place of business or residence of the party notified.

EVENTS IN OUR HISTORY.

- 1492 Columbus discovered America.
- 1519 Cortez began the Conquest of Mexico.
- 1607 Jamestown, Va., was settled.
- 1620 Pilgrims by the Mayflower landed.
- 1623 Manhattan Island settled.
- 1634 Maryland settled by Roman Catholics.
- 1636 Rhode Island settled by Roger Williams.
- 1664 New York taken from the Dutch.
- 1682 Pennsylvania settled by William Penn.
- 1690 First newspaper in America, at Boston.
- 1759 Canada taken from the French.
- 1773 Steam engine perfected by Watt.
- 1773 Tea destroyed in Boston Harbor.
- 1775 Battle of Lexington, April 19.
- 1775 Battle of Bunker Hill, June 17.
- 1776 Declaration of Independence.
- 1777 Burgoyne's surrender, October 17.
- 1781 Cornwallis's surrender at Yorktown.
- 1787 United States Constitution adopted.
- 1789 Washington first inaugurated President, April 30.
- 1803 Louisiana purchased from the French.
- 1807 Fulton's first steamboat voyage.
- 1812 Second war with Great Britain began.
- 1813 Perry's victory on Lake Erie.
- 1815 Battle of New Orleans, January 8.
- 1819 First steamboat crossed the Atlantic.
- 1820 Missouri Compromise adopted.
- 1823 Monroe Doctrine declared, December 2.
- 1828 First passenger railroad in the United States.
- 1832 South Carolina Nullification Ordinance.
- 1835 Morse invented the telegraph.
- 1835 Seminole war in Florida began.
- 1845 Texas annexed.
- 1846 Sewing machine completed by Elias Howe.
- 1846 War with Mexico began.
- 1848 Gold discovered in California.
- 1859 John Brown's raid in Virginia.
- 1861 Outbreak of Civil War.
- 1861 Battle of Bull Run, July 21.
- 1863 Slavery abolished in the United States, January 1.
- 1863 Battle of Gettysburg, July 1 to 3.
- 1865 Lee surrendered at Appomattox, April 9.
- 1865 President Lincoln assassinated, April 14.
- 1867 Emperor Maximilian of Mexico executed.
- 1871 The great fire in Chicago.
- 1872 The great fire in Boston.
- 1876 Centennial Exposition.
- 1881 President Garfield shot, July 2.
- 1889 Brazil became a Republic.
- 1893 Columbia Exposition at Chicago.
- 1897 Klondike gold discovery.
- 1898 War with Spain.
- 1900 Leaksville Woolen Mills enlarged.

THE PITH OF MANY BOOKS.

A square mile contains 640 acres.
Telescopes were invented in 1590.
A barrel of rice weighs 600 pounds.
A barrel of flour weighs 196 pounds.
A barrel of pork weighs 200 pounds.
A firkin of butter weighs 56 pounds.
A span is ten and seven-eighth inches.
A hand (horse measure) is four inches.
Watches were first constructed in 1476.
The average human life is thirty-one years.
Modern needles first came into use in 1545.
Space has a temperature of 200 degrees below zero.
The first newspaper advertisement appeared in 1652.
Robert Bonner refused \$100,000 for the trotter Maud S.
Until 1776 cotton spinning was performed by the hand-spinning wheel.
Measure 209 feet on each side and you will have a square acre within an inch.
The first steam engine on this continent was brought from England in 1753.
The first knives were used in England, and the first wheeled carriage in France in 1559.

THE GRAMMAR IN RHYME.

Of course the whole science of grammar cannot be comprised in twenty lines of verse, says the Standard American Encyclopedia, but the ten couplets which are here given have started many learners upon the difficult road which leads to the mastery of language:

Three little words you often see,
Are articles, *a*, *an* and *the*.
A noun's the name of anything,
As *school* or *garden*, *hoop* or *swing*.
Adjectives tell the kind of noun,
As *great*, *small*, *pretty*, *white* or *brown*.
Instead of nouns the pronouns stand,
Her head, *his* face, *your* arm, *my* hand.
Verbs tell of something to be done—
To *read*, *count*, *laugh*, *sing*, *jump* or *run*.
How things are done the adverbs tell,
As *slowly*, *quickly*; *ill* or *well*.
Conjunctions join the words together,
As man *and* woman, wind *or* weather.
The preposition stands before
A noun, as *in* or *through* the door.
The interjection shows surprise,
As *O!* how pretty! *ah!* how wise.
The whole are called nine parts of speech,
Which reading, writing, speaking, teach.

ALPHABETICAL LIST OF INVENTIONS AND INVENTORS.

<i>Invention.</i>	<i>Inventor.</i>	<i>Date.</i>
Air Gun	Morin	1595
Anaesthetics	Morton	1846
Air Brake	Westinghouse	1869
Air Pump	Otto von Guencke	654
Aluminium	Oersted	1817
Anchor	Anacharsis, the Scythian	594 B.C.
Artificial Ice	Vallance	1824
Balloon	Montgolfier	1783
Bicycle	Lallemont	1866
Barometer	Evangelista Torricelli	1643
Blast Furnace	Siemens	1833
Bessemer Steel	Bessemer	1855
Bellows	Anacharsis, the Scythian	593 B.C.
Breech-loading Firearms		1811
Clock	(Unknown, first one erected in Padua in the 11th century)	
Concrete Pavement	Straub	1863
Color Photography	Lippmann	1890
Dial	Anaximander	550 B.C.
Diving Bell	Unknown	1509
Electric Motor	Jacobi	1834
Electric Clock	Wheatstone	1840
Elevated Railway	Palmer	1821
Electric Light	Sir Humphrey Davy	1813
Electro Magnet	Sturgeon	1825
Electrotype	Spencer and Jacobi	1837
Engraving	Chinese	1000 B.C.
Firearms	Unknown	1364
Fire Engines	Hantsch	1657
Fresnel Lens	Fresnel	1823
Gas	Van Helmont	1600-1625
Gasmeter	Robinson	1831
Geographical Maps	Anaximander	550
Glass	Phoenicians	date unknown
Gun Cotton	Schoenbein	1816
Gun Powder	Barthold Schwarz	1320
India Rubber goods	Chaffee	1836
Illuminating Gas	Eustis and Zigler	1815
Ironclad Ships	Thos. Gregg	1814
Lightning Conductors	Benj. Franklin	1752
Lime Light	Drummond	1826
Locomotive	James Watt	1759
Matches	Walker	1827
Miners' Safety Lamp	Davy	1815
Postage Stamp	Norton	1859
Phonograph	Edison	1877
Parrott Gun	Parrott	1862
Platform Scales	Fairbanks	1831
Photography	Wedgewood	1802

<i>Invention.</i>	<i>Inventor.</i>	<i>Date.</i>
Pneumatic Dispatch	Clark and Varley	1854
Piano Forte	Bartolomeo Gutenberg	1438
Reaping Machine	McCormick	1834
Railway Cars	Knight	1829
Rapid-fire Gun	Gatling	1861
Repeating Rifle	Sharp	1848
Sewing Machine	Elias Howe	1841
Sleeping Cars	Woodruff	1856
Stem-winding Watch	Noel	1852
Steam Hammer	Naysmith	1838
Steamboat	Symington (on the Clyde).....	1802
Steamboat	Robt. Fulton	1807
Steel Pen	Wise	1803
Steam Fire Engine	Ericsson	1830
Screw Propellor	Ericsson and Smith	1836
Steam Engine	James Watt	1763
Steam Printing Press	Konig	1814
Suspension Bridge	Telford	1818
Submarine Cable	Wheatstone	1843
Telegraph	S. F. B. Morse.....	1837
Typewriting machine	Thurber	1843
Torpedo	David Bushnell	1777
Truss Bridge	Price and Phillips	1841
Telephone	Elisha Gray, Thos. A. Edison and A. G. Bell	1877
Turrett Monitor	Ericsson	1862
Thermometer	Drebbel, Sanctorius	1609
Wireless Telegraphy	Marconi	1896
Wood Paper	Walls and Burgess	1863

INTERESTING STATISTICS.

MATERIAL ADVANCE IN THE SOUTH.

Some facts condensed from an article in "Harper's Weekly."

The wonderful industrial progress in the Southern States during the past two decades, has, probably, never been equalled in any other part of the world. We are now making a great variety of articles for which the old-time planters were dependent upon the northern factories or secured from abroad. We have demonstrated our ability to make our own cotton and woolen goods and our own furnaces have set the market price for the world. Our railroad systems have been perfected and fully equipped. Our cities have taken on a new vitality, and our farmers have diversified their crops. From recent statistics, we present a few leading items which should be a source of pride to every man who reads them.

	1880.	1899.
Wages paid to factory hands	\$75,900,000	\$350,000,000
Bushels of grain grown	431,000,000	736,600,000
Capital invested in cotton seed	\$3,500,000	\$40,000,000
Cotton crop, bales	5,750,000	11,274,000
Cotton worked up in Southern mills, bales ..	233,886	1,399,000
Capital invested in cotton mills	\$21,900,000	\$125,000,000
Coal mined, tons	6,000,000	40,000,000
Capital invested in manufacturing	\$257,000,000	\$1,000,000,000
Pig iron produced, tons	397,000	2,500,000
Railroad mileage	20,600	50,000

The largest ships ever built in America were recently launched from a Southern ship yard (at Newport News, Va.) Southern rails, locomotives and coke are going abroad, and in timber we hold a great reserve supply which is in itself the wealth of an empire.

THE MARCH OF PROGRESS IN THE UNITED STATES.

The following facts indicate in some degree, the wonderful advance our country has made within the past five years:

1. Population advances at a slower pace than ever before recorded, which is due, not merely to restricted laws against immigrants, but also to a diminution of natural increase, arising apparently from higher death rate.
2. Import trade has fallen off thirty per cent. in five years, partly owing to changes in the tariff, partly to a fall of prices, partly to the development of home manufactures. On the other hand, exports have risen by \$400,000,000.
3. Manufacturing industry appears to have grown prodigiously, the consumption of raw material showing an increase all around, of about 50 per cent. in five years.
4. Agricultural interests are prosperous as regards tillage, the area under grain having risen 10,000,000 acres since 1893, but pastoral farming seems to have suffered, the number of live stock falling 25,000,000, the value being \$6,000,000 less.

5. Mining shows a great increase in the production of gold, copper and petroleum, while there has been, of course, a decline in the output of silver.

6. Finances have been deranged by a heavy fall of import dues and an increase of expenditure resulting from the war with Spain. The deficit of 1898, reached \$103,000,000. Public debt has arisen \$250 000,000 since 1893.

7. Money actually in circulation has risen \$241,000,000, entirely in gold, silver and paper money, showing no sensible change. At the same time, the Treasury nas had an increase of \$15,000,000 in gold and \$22,000,000 in silver.

8. Banking business, to judge by the national banks, has increased 30 per cent. in five years, or three times as fast as population, an unquestionable proof of the general prosperity of the Union

9. Notwiths anding the increase in mileage, the gross receipts of rail-roads fell \$83,000,000, the net profits \$21,000,000.

10. The tonnage of port entries has risen 30 per cent., but this has been entirely in ships carrying foreign flags. The merchant shipping of the United States shows a steady decline.

11. Public instruction progresses steadily, the average daily school attendance increasing much faster than population. School expenditure is three times as much as in the United Kingdom.

12. Land grants to settlers and farmers average 10,000,000 acres yearly, and the area under farms it at present approximately 707,000,000 acres, of which one-third is under crops, two-thirds under pasture.

AMERICAN HOMES.

According to the latest compilations the United States contains 12,690,152 families. These families are located as follows:

Upon farms,	4,767,179
In villages,	4,224,560
In cities between 8,000 and 100,000 population,	1,749,549
In cities of 100,000 or greater population,	1,948,834

Among the farming families, which represent slightly more than one-third of the whole population, 47 per cent. own their properties free of incumbrance, and 19 per cent. in addition are owners subject to mortgage.

Among residents of villages 34 per cent. own their homes unincumbered, and 10 per cent., in addition, own subject to mortgage. The proportion of those owning unincumbered homes in the smaller cities is 24 per cent., and of mortgaged homes 12 per cent. In the greater cities but 9 per cent. of the residents own their homes absolutely, and only about 14 per cent. in addition are even partial owners. Thus, in the great cities, as it will be seen, 77 per cent. of the people pay rent. Of the entire population of the country nearly 48 per cent. own their homes, either wholly or in part. The partial owners pay annually, in interest upon mortgages against homes (not including farms) the sum of \$65,182,629, or an average of \$80.00 per home. The average rate of interest is 6.23 per cent. The average value of the American home is \$3,250, and the average incumbrance is \$1,224.

As the highest sense of security and contentment known to mankind

is derived from the ownership of property, and more especially of a home, it must be manifest that a greater degree of happiness and peace of mind abides with those who live apart from the cities, either upon farms, or in villages, and however hard at times may seem the lot of the tiller of the soil, the condition of those upon the same plane of life in the cities is far more unfavorable to the enjoyment of the years that make up the sum of their lives.

CHRISTIANITY AND THE BIBLE.
THE RELIGIONS OF MANKIND.

The above diagram tells its own story.

The relative areas indicate the numerical proportions of the world's population.

PROGRESS OF CHRISTIANITY.

The life of Jesus closed with over five hundred brethren; the Pentecostal revival, with five thousand conversions. In the first fifteen centuries there was a gain of one hundred million. In the next three, the number was doubled; and in the present century the number has been doubled again.

CONTENTS OF THE BIBLE.

Leading features and characteristic topics of each book may be stated as follows (from Bagster's Teacher's Bible):

A. THE OLD TESTAMENT.

1. The Hexateuch.

1. Genesis.—The early history of mankind and the patriarchs.
2. Exodus.—The exodus and the moral law.
3. Leviticus.—The priestly law.
4. Numbers.—The social and political law.
5. Deuteronomy.—The prophetic law.
6. Joshua.—The conquest of Canaan.

2. The National History of Israel.

1. Judges.—The dark ages of Israel.
2. Ruth.—An idyll, with hope of better days.
3. Samuel.—Establishment of the kingdom.
4. Kings.—Political history of the kingdoms of Judah and Israel.
5. Chronicles.—Priestly history of the two kingdoms.
6. Ezra.—The priestly restoration after the captivity.
7. Nehemiah.—The political restoration.
8. Esther.—A picture of the exile.

3. Poetical Books.

1. Job.—The drama of Providence.
2. The Psalms.—Hebrew lyrics and hymns of worship.
3. Canticles.—The Hebrew pastoral.
4. Lamentations.—Hebrew elegies.

4. Books of Wisdom.

1. Proverbs.—Didactic practical wisdom.
2. Ecclesiastes.—Reflective practical wisdom.

5. The Four Great Prophets.

1. Isaiah.—The evangelical prophet.
2. Jeremiah.—The prophet of sorrow.
3. Ezekiel.—The priestly prophet.
4. Daniel.—The apocalyptic prophet.

6. The Twelve Minor Prophets.

1. Hosea.—The prophet of divine love.
2. Joel.—The preacher of the locust judgment.
3. Amos.—The lay prophet and unconventional preacher of righteousness.
4. Obadiah.—The preacher of judgment upon Edom.
5. Jonah.—The foreign missionary.

6. Micah.—The rustic Isaiah and evangelical prophet.
7. Nahum.—The preacher of judgment upon Nineveh.
8. Habakkuk.—The preacher of judgment upon Babylon.
9. Zephaniah.—The herald of the day of wrath for the world and judgment upon Judah.
10. Haggai.—The prophet of the second temple.
11. Zechariah.—The preacher of the Messianic kingdom in opposition to the kingdom of earth.
12. Malachi.—The herald of the coming of the Lord.

B. THE NEW TESTAMENT.

1. The Four Gospels.

1. The Synoptic Gospels:
 - (a) St. Matthew.—The Gospel for the Jews.
 - (b) St. Mark.—The Gospel for the Romans.
 - (c) St. Luke.—The Gospel for the Gentiles.
2. St. John.—The supplementary Gospel.

2. The Acts of the Apostles.

The history of the early spread of Christianity.

3. The Pauline Epistles.

1. Romans.—Justification by faith.
2. 1 and 2 Corinthians.—The power of the cross applied to conduct.
3. Galatians.—The law and the Gospels.
4. Ephesians.—The church as the body of Christ.
5. Philippians.—The identification of the Christian with Christ.
6. Colossians.—The glory of Christ.
7. 1 and 2 Thessalonians.—Christian life in view of the second advent.
8. 1 and 2 Timothy and Titus.—Pastoral epistles.
9. Philemon.—Christianity in domestic life.

4. Hebrews.

The superseding of the old covenant by the new.

5. The General Epistles.

1. James.—Practical Christianity.
2. 1 and 2 Peter.—Christian privileges and duties.
3. 1, 2 and 3 John.—The life of love.
4. Jude.—Dangers of apostasy.

6. Revelation.

Coming judgments and the second advent.

THE BIBLE.

All religions of the civilized world have their sacred books, containing, in most part, the system of belief of their adherents, and with more or less claim to a divine origin. For example, the Mohammedans claim for the Koran that it lay before the throne of God from the beginning of time—was never created. In this the Bible differs from all other sacred books. As Drummond has thoughtfully said: "In the distant past there flowed among the heathen nations of the world a small warm stream like the Gulf Stream in the cold Atlantic—a small stream of religion, and

now and then at intervals men carried along by this stream, uttered themselves in words as they were moved by the Holy Ghost. The historical parts came out of facts, the devotional parts came out of experiences of the heart, the letters came out of circumstances, and the Gospels out of all three. Thus the Bible grew out of religion—was its effect and not its cause.”

This process continued during a period of sixteen hundred years, until forty authors, from the shepherd to the king, had made their contributions to its contents. The fact that men from every station of life, the learned and the unlearned, the rich and the poor, were instruments in its composition, writing at long intervals, and often without knowledge of what had been previously written, yet with unerring accuracy unfolding the same system of truth, this fact constitutes one of the strongest internal evidences that “All Scripture is given by inspiration of God,” and that these men wrote as they were moved by the Holy Ghost.

WHAT THE SCRIPTURES TEACH.

The Scriptures principally teach “what man is to believe concerning God, and what duty God requires of man.” They are divided into two main parts—The Old Testament (Covenant), and The New Testament (Covenant).

The Old Testament contains, primarily, the history of creation and redemption, and is naturally divided into six Epochs:—

1. From the fall of man to the flood.
2. From the flood to the calling of Abraham.
3. From the calling of Abraham to Moses.
4. From Moses to David.
5. From David to the captivity into Babylon.
6. From the captivity into Babylon to the incarnation of Christ.

GENESIS—A book of origins—beginnings—

1. The beginning of creation—Gen. 1 : 1.
2. The beginning of sin—Gen. 3 : 6.
3. The beginning of the Gospel—Gen. 3 : 15.
4. The beginning of National civilization—Gen. 4 : 17-24.
5. The beginning of nations and languages—Gen. 11 : 1, 9, 17.
6. The beginning of the church—Gen. 12 : 1-3, 17 : 7,

PERIODS OF OLD TESTAMENT HISTORY.

- C to C.—Creation to Christ.
- C to A.—Creation to Abraham.
- D to D.—Deluge to David.
- E to E.—Exodus to Exile.
- C to A.—History of the race.
- A to C.—History of the Covenant people.

LAST FOUR PERIODS, VIZ:

1. Patriarchal Period.—Abraham to the Exodus.
2. Period of the Judges—Exodus to David.
3. Period of the Kings—David to Exile.
4. Period of Foreign Dominion—Exile to Christ.

UNDERLYING PRINCIPLE OF THE OLD TESTAMENT.

Opening with a short record of "The Beginnings," we are introduced to Eden with its beauty and happiness, quickly followed by its desolation and curse.

Adam fell from the estate wherein he was created by sinning against God.

"So he drove out the man."

"The drama of exile has often been repeated in the world's history, but never so sadly as in the experience of the first pair, when—

"They, hand in hand, with wandering steps and slow,
Through Eden took their solitary way."

This doleful picture signalizes the fact that man, made in the image of God, with free access to His presence, has become, by his voluntary act, an exile and a rebel, forever losing the right to come into divine presence, for petition or communion, in his own name, or upon his own merit. So we have the underlying principle—no access to the King by the rebel, but through a Mediator. The sacrifices, the ritual, the High Priest, all emphasizing this principle, and typical of that "Mediator of the better covenant," the second Adam, who, "in the fullness of time," would make the last and only sacrifice to satisfy divine justice. The rise and progress of the work of redemption, wherein the Mediator undertakes to make atonement, are minutely unfolded in history and prophecy until Malachi closes the sacred canon.

INTERVAL BETWEEN THE OLD AND NEW TESTAMENT.

By means of history and prophecy do the Scriptures give account of the events by which the work of redemption was carried on from the beginning to its completion. When history ceases prophecy takes its place. While the Old Testament lights, the "stars of the long night," hide their heads before the rising Sun of Righteousness, yet prophecy had cast a ray of light through the dark hours before the dawn of the "day spring from on high." Although four centuries of silence are unbroken by a single sacred historian, yet the prophet Daniel had minutely covered the entire period in foretelling the destruction of the Persian empire, and setting up the Grecian by Alexander the Great, the subsequent division of this kingdom into four parts, and the final overthrow of this divided kingdom and the establishment of the Roman Empire. So we have an unbroken thread of sacred narrative from the closing words of Malachi, "Behold, I will send my messenger, and he shall prepare the way before me," and the announcement in the opening words of the New Testament, four hundred years afterward, "In those days came John the Baptist, preaching in the wilderness of Judea, and saying, Prepare ye the way of the Lord."

Christ and His redemption is the theme of the Old Testament, in history, prophecy and song, differing only from the New in that it con-

tains the Gospel under a veil, but the New contains it unveiled, "So that we may see the glory of the Lord with open face."

THE NEW TESTAMENT.

The first four books of the New Testament are commonly called "The Gospels," containing particularly the biography of the earthly life of the Incarnate Son of God, by the voluntary close of which He actually purchased that redemption which was foreshadowed through the old dispensation. Though written by four different persons and containing much in common, yet they throw light upon the earthly pilgrimage of the Lord from four distinct points of view. Matthew writes of Him from the standpoint of a Jew, tracing His genealogy back to Abraham. Mark views Him more particularly as the Spiritual Conqueror, the Wonder-worker, the Lion of the tribe of Judah, filling the people with amazement and fear. His Gospel was designed especially for Roman readers. Luke views the life of the Lord from a broader field, tracing His genealogy to Adam, thus bringing Him in touch with the whole world, so that "Our Redeemer" is also "Our Kinsman." The reflective, thoughtful John takes a still deeper and broader view than either of his associates, tracing the genealogy, so to speak, of Christ to the very bosom of God the Father, thus emphasizing the divine nature of the Son of Man.

Following the Gospels is "The Acts of the Apostles," giving an account of the doings of the Apostles in carrying out the marching orders of their Lord—"Go ye into all the world and preach the Gospel"—not, however, until the advent of the Spirit, who would endue them with "power from on high." While the Spirit, the third person of the Trinity, was in the world from the beginning, yet not until Pentecost did He come in His official capacity, henceforth to apply to men's hearts the redemption purchased by Christ. Pentecost may properly be called the "Birthday of the Spirit," and upon His advent went the Apostles forth upon their divine mission—"Those who were scattered abroad, went everywhere preaching the word," and as a result of these apostolic activities the founding of many churches is recorded in the Acts. As a natural sequence to this gathering into the Church of Jew, Greek, Barbarian, bond and free, many peculiar, and sometimes serious complications arose upon questions social and moral, calling at times for the admonition, warning and explanation of the Apostles. Hence, we have the Epistles, called forth in almost every instance from some peculiar circumstance connected with the church to whom it was addressed. The question would naturally arise in the minds of early Christians, "What is to be the final result of all this labor, hardship, persecution, sorrow and joy?" The Revelation answers the question for them, as it does for the thoughtful now.

The Bible closes with a grand panorama of the ultimate triumph of that Spiritual Kingdom which has been opposed from the beginning by the world, the flesh and the devil. While its language is often that of mysterious symbol, yet it pictures with simple vividness the ultimate triumph of the friends, and total destruction of the enemies, of the Gospel.

In Benton's "Thirty Years' View" we find this interesting incident of John Randolph, of Roanoke, upon his deathbed. "The last time I saw him," says the writer, "when in full view of death, I heard him read the chapter of the Revelation of the opening of the seals, with such power

and beauty of voice and delivery, and such depth of pathos, that I felt as if I had never heard the chapter read before. When he had gotten to the end of the opening of the sixth seal, he stopped the reading, laid the book (open at the place) on his breast, as he lay on his bed, and began a discourse upon the beauty and sublimity of the Scriptural writings, compared to which he considered all human compositions vain and empty. Going over the images presented by the opening of the seals, he averred that their divinity was in their sublimity; that no human power could take the same images and inspire the same awe and terror, and sink ourselves into such nothingness in the presence of the 'wrath of the Lamb'; that he wanted no proof of their divine origin but the sublime feelings which they inspired." The same writer records the expression of the brilliant Randolph, "Though woman had lost us paradise, she had gained us heaven," thus beautifully epitomizing the Scripture record, which reveals the purpose of the Almighty to bring man into still closer relationship to Him than Adam enjoyed before the fall. During Adam's short tenure of Eden he was only a holy servant, a "tenant by courtesy," so long as he obeyed, with no vested rights for the future. God would not leave him thus, but would rather elevate him and his posterity to the more exalted position of heirs in the family of a Divine Father. The unfolding and preparation for the completion of the divine plan are given in the Old Testament Scriptures. The consummation, in the sacrifice of the innocent substitute, is revealed in the New, and as the revelation closes the veil is partially lifted, giving a glimpse of the blessed exaltation as the redeemed assemble at the marriage supper of the Lamb, singing, "Thou art worthy to take the Book, and to open the seals thereof: for Thou wast slain, and has redeemed us to God by Thy blood, out of every kindred, and tongue, and people, and nation"—the angels catch up the chorus—"Worthy is the Lamb that was slain to receive power, and riches, and wisdom, and strength, and honor, and glory, and blessing." While heaven resounds with the universal chorus, "Blessing, and honor, and glory, and power, be unto Him that sitteth upon the throne, and unto the Lamb forever and ever."

BEN FRANKLIN'S EPITAPH.

The curious epitaph that appears upon the tomb of Benjamin Franklin was written many years before his death by the philanthropist himself:

“THE BODY OF
B. FRANKLIN,
PRINTER,
LIKE THE COVER OF AN OLD BOOK,
ITS CONTENTS TORN OUT,
AND STRIPPED OF ITS LETTERING AND GILDING,
LIES HERE FOOD FOR WORMS.
BUT THE WORK SHALL NOT BE WHOLLY LOST;
FOR IT WILL, AS HE BELIEVED, APPEAR ONCE MORE,
IN A NEW AND MORE PERFECT EDITION.
CORRECTED AND AMENDED
BY THE AUTHOR.”

This most interesting epitaph may well stand as the confession of a great man's faith, answering to the soul's satisfaction the cry, “If a man die, shall he live again?”

WHERE BEN FRANKLIN SLEEPS
Christ Church Cemetery, 5th and Arch Sts., Philadelphia

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