

AGRICULTURAL

SHEEP AND HOGS AS LAND IMPROVERS.

"The owners of small fruit farms find that they cannot handle cattle as profitably as those who own larger tracts of land. Cattle, too, were more cheaply grown when a large part of our land was yet uncleared. Since the land has been brought under the plow and the fields have been brought under a three to five-years' rotation farmers have depended more on hogs for condensing their corn crops and have fallen into the habit of baling and shipping their straw and hay," says Mr. Bonham in *Breeders' Gazette*. "By this means they have helped out the short receipts from the sale of grains. It has brought a little more cash to meet their pressing needs. The system is very defective as it is only a sure way of wasting the principal. With the straw and hay go the grain, and these represent for every thirty bushels of wheat thirty-three pounds of nitrogen, 9.3 pounds potash and 14.2 pounds of phosphoric acid. The straw of this amount of wheat contains fifteen pounds phosphoric acid. With every acre of hay (one and one-half tons) goes forty-nine pounds nitrogen, 50.9 potash and 12.3 pounds phosphoric acid.

"With twenty-five acres of wheat the farm loses each year, 1,100 pounds nitrogen, 790 pounds potash and 527.5 pounds phosphoric acid, worth as these elements of fertility sell in the form of commercial fertilizers \$262.43, whereas if the straw is kept for food and bedding and bran and middlings returned, and supplemented with oil meal to complete or improve the rations, we can feed these by-products, and the manure is worth almost as much as the cost of the by-products.

"The question, then, of keeping up the small farms where cattle are few becomes a most important one. Sheep and hogs can yet be kept if one cannot handle cattle. Everyone recognizes the value of sheep as renovators of soil. Their virtues have been sounded by the flock-master until all accept their figure of the golden foot. The sheep do well on hilly and broken parts of the farm and seek the knolls and highest points, where the farmer cannot readily carry fertilizers or manures from the stables. The hog, on the other hand, loves his ease, to well and seeks the low land and rich growth beside the water-courses. As commonly handled the hog does not scatter his excrement so advantageously to the soil as does the sheep, but he is the condenser of food rich in fertilizing material and it can be utilized if the farmer cares to do so. Instead of feeding on a hillside or beside a stream where the wealth will be washed away, feed on the clover or old Timothy sod and arrange the feeding places so as to take the hogs to the thinnest points for feed. We have a striking illustration of the advantages of keeping hogs on old Timothy sod. Last fall and winter we put the brood sows on an old Timothy meadow which is now in corn and other crops. They were not fed more than a week in the same place. To-day the corn and other crops on the meadow show exactly where the food was given. The stubble prevented any waste from washing and the droppings were distributed, and their value is apparent in the ranker growth that follows. The sleeping places were in an adjoining lot, but this was a mistake. We will improve on that by putting portable pens on the meadow or clover field where the fall and winter feeding is done. We have tried this plan on clover sod and find it the best means of saving and applying manure. There is as nearly no waste as can be devised. The hogs have comfortable quarters and fresh ground and when farrowing time in the spring comes the permanent pens are used and the fields plowed. The sheep can be wintered about the barn, so there is the least possible waste and a valuable lot of manure stands for the feed consumed and care bestowed after the crop of wool and lambs has been produced. With a little care in arranging the sleeping and feeding places of hogs they will distribute their droppings to great advantage. If, however, they are fed at the same place the year round, and that beside a running brook, they consume the best of feed and we have only the pork of lower grade, having lost the secondary profit of the business.

"On many farms there is little benefit to the soil from keeping hogs; but it is not the hogs' fault. Neither sheep nor hogs will do well on bare lots or fields, and there the waste or loss of droppings is great. With corn cheap and labor high we can find profit in letting the hogs gather part of the corn crop. They will waste little of it and leave a vast amount of fertility behind. If one can provide water the hogs will gather the corn free of charge and leave every particle not made into pork for the benefit of the ground. The saving of labor and fertility make the old-time practice of hogging off corn attractive now. Sheep do well to precede the hogs and clean up the fence corners, eat up the lower blades and all weed and grass seeds that have come in after laying by the corn. If sheep are let out of the cornfield at night and the corn stands up well they will not disturb the corn until they have cleaned up all the grass and weeds. By a little care in hithering well the pens and lots and keeping hogs as much as possible on the clover and on the sod land that is to be plowed we can add to the fertility of our lands and to the health of our herd and flock. If hogs are allowed to run and root as they please they can become an unmitigated nuisance, a damage to the farm and a disgrace to the owner. But properly handled there is no more profitable stock and none more easily controlled."

SHORTHORNS AND EARLY MATURITY.

As an all round breed of cattle for beef, early maturity otherwise, too much can never be said in behalf of Shorthorn cattle. This breed has added millions of value to the cattle of the country in grading them up by crosses. No breed can be found, says the *Farm Journal*, that has more desirable qualities as a beef producing animal for

the general market than the Shorthorn, and no breed has attained a greater popularity and a distribution so wide during the past century as this. This breed is noted for its size and weight, early maturity, aptitude to fatten and fine bone structure, thus furnishing a large proportion of meat of fine quality with a small proportion of waste. The Shorthorn is therefore an animal that will furnish a large amount of flesh in the most desirable portions, ripen for the shambles early, easy to fatten and one that will produce a large amount of meat with little fat. Shorthorns will not, however, do well on a poor range as will some other breeds. They will not thrive on limited rations or neglect of any kind.

The objection has been urged that the rapidity with which they fatten prevents their meat from ripening sufficiently before appearing as beef in the market, and also that there is a disproportion of fat to the lean meat, which is not formed in the breed of slower growth and maturity; but these reasons are not sufficiently well founded to deserve a great amount of consideration. Another good quality about this breed is the ready adaptability in transforming native stock by crossing. The Shorthorn grades produce some of the best beefs that are brought into the markets of the country. It is greatly superior to that produced by native cattle, and should command a higher price, and its fine quality should create a good demand. When well cared for, both native and Shorthorn cattle being kept in the same herd, the former at a year and a half weigh from 600 to 800 pounds, and the latter should average from 1,000 to 1,200 pounds. At two years old the native will have reached an average weight of 1,000 pounds, the Shorthorn from 1,200 to 1,400 pounds.

TO PRESERVE CUT FLOWERS.

The woman who wishes to enjoy the whole of the short life of her cut flowers, instead of only a short portion of it, will not settle down upon any one unvarying method for preserving them, but will rather vary it according to the different causes which lead to their decay.

Take, for instance, the flowers of a succulent nature like the iris. The stems, when put into water, slough away, and soon give an unpleasant odor. There are two remedies which may be applied in this case; either one should put a mild disinfectant in the water and frequently change it, or cut off the ends of the stalks at short intervals.

A good point to remember in gathering flowers of the iris family, and indeed all succulent plants like the primrose, the snowdrop, the lily, and the poppy, is to pick them while still in the bud, as they will often suck up enough water to quite carry out their natural life.

Another flower whose stem most rapidly decays and corrupts the water is the mignonette, and it is often best to sacrifice it while its head is said freshly green. Heliotrope, like mignonette should always be put in water by itself, for it not only fades and turns brown rapidly, but it will kill almost any flower put with it. The cause of decay in hard-wooded plants like the azalea and camellia is that they do not take up enough water, nor that they have any tendency to pollute it, so that to cut their stalks frequently would be of little avail. The hard, brittle wood has no power of absorption, but if when putting such flowers in a vase or bowl you make sure that the lowest leaves attached to the blossoms are under water, the effect is magical. The tender green of the fresh leaf absorbs the water and acts as a conductor, in its turn nourishing the blossom. Ferns, and especially maiden hair, are very short lived when they have to look to the stem alone for nourishment, and the most effectual way to preserve them is to see that the lower part of every frond is well under water. Cut flowers require as a rule a far larger quantity of water than is given them, through the capacious bowls and vases now in vogue come much nearer meeting their wants than the slender, elegant forms that continue to adorn our cabinets and mantels. We must be guided in our expectations of the longevity of a flower, however, by its normal life, and not expect the frail blossom of a day to rival the splendid orchid in its three weeks' duration.

Flowers should always be placed in water as soon as possible after being picked; when received by post in some what wilted condition, an immediate plunge into hot water with a little sal volatile will accomplish wonders in the way of reviving them. Lilac, laburnum and azaleas require to have a piece of the bark stripped up and left hanging, and this, with the addition of a few leaves in the water will often keep them in quite a fresh condition for weeks.

The bouquet which you have carried during an evening will be sure to revive again, if you will spray it well with water and put it under a bell glass; and if you wish to wear flowers in your hair or on your corsage, they may be made to retain their freshness for an entire evening by putting a bit of sealing wax over the ends.

WONDERFUL MACHINE.

A wonderful calculating machine has been brought forward by M. Leon Bolee, a French inventor. This mechanism does all the figuring automatically, whether it be a question of addition, subtraction, multiplication, division, equation, extraction of roots, reduction of differentiation, the result being arrived at with marvelous rapidity and with invariable accuracy. In its exhibition before the French Institute examples were given by various mathematicians present, and in figuring out the results not a single error was detected. The difficulty of explaining such a machine is obvious, but its wonderful efficiency was verified by the following multiplication, the correct answer to which was arrived at in less than three seconds: 6,222,333,444 by 8,888,111,224, this being in figures 55,304,791,723,086,975,456.

BY NO MEANS BEHIND.

Yeast—Your landlady says you are behind with your board.
Crimsonhead—Well, she's dead wrong. I'm ahead. I owe her \$45.

A CASE OF SENTIMENT

The summer evening was closing in, and the shadows of the tall poplars by the roadside fell aslant the village street and rested on the grey front of the low cottage at the corner, with its high thatched roof and stone-mullioned windows. At the open door stood a little old woman, upright as a dart, with homely features refined by a lifetime of patient and unselfish toil. Her dark hair scarcely touched with grey was smoothed back under a neat frilled cap, and she wore a faded black gown which showed off her trim, almost girlish figure. The day's work was over, and she had come out on the threshold of her home to enjoy the mellow sweetness of clambering roses and clematis, with which the slumberous air was laden.

Louie Cole was a lonely woman with neither kith nor kin, and she eked out her narrow livelihood by selling a few sweets and toys to the children of Combe, as they passed her door on their way to school. Her front window was adorned with sundry glass bottles full of colored "goodies," with tiny mugs and balls of string, and angular jointed dolls and wooden horses, and such-like stock in trade. The passing months saw but little change in that simple array of delights, for it was only at rare intervals that some happy child came to make a larger purchase than "a farden's wuth o' all zorts."

The shop alone would have been but a poor mainstay, but Louie had also a small annuity from her old mistress, who had died more than twenty years before; moreover she earned something by making smock-frocks, though these ancient garments were sadly going out of fashion in the village, and her more delicate and elaborate stitches were no longer needed.

As she stood looking out with wistful eyes towards the rosy western sky, something of its radiance was reflected on her pale face, and after the sultry heat of the day, she felt soothed and caressed by the balmy freshness of the air. Suddenly she was roused by the sound of approaching footsteps, and saw her neighbor, Jane Varden, coming quickly round the corner. The young woman was looking more slatternly and untidy than usual, with her dirty sunbonnet put on all awry, and her sleeves still tucked up from her work but her face was full of eager excitement.

"Oh Louie! have 'ee heard the news?" she cried. "You mid' a' knocked I down wi' a feather, when our Dick, he comed hoam i' the wagon, a drevan, as proud's a peacock, all by hissell, an' telled I about pore wold Gideon."

Her listener started as though a blow had struck her, and with trembling lips could hardly frame the question:—"What have a come to he? Do 'ee tell I quick, Jeane!"

"Why look 'ee see, t'wur like this. Varmer Yeatman sent he in to Mere betimes this mornin', wi' a load o' new hay, an' he'd a got there all right, zo fur, the Market Place when he gie our Dick the reins, an' slid down vor to walk a bit, when all o' a sudden, down he fell in a fit." At this climax of her story, a stifled groan checked her for a moment, then she went on, all undaunted:—"He've a rare lot o' sense vor a lad o' twelve, have our Dick, an' he got the wold man a tookt to the 'Firmery, an' wi' all the bother o' the measter's hay, an' the wagon, an' the hosses, why he did'n go up to the doctor, zo bold as brass, an' says he 'Please zir, what be the matter wi' Gideon Seamark?'"

"An' what did the doctor zay?" asked old Louie, bending forwards in breathless anxiety.

"Zays he, 'He'll never do nar' a stroke o' wark no more, an' us can't do nought vor un, zo do 'ee tell his v'oks vor to come an' fetch 'en hoam o' Zatturday.'" Jane Varden paused, to give full dramatic effect to the verdict; then she continued:—"T'es just about a bad job, vor he've nar' a soul belongen' to he, an' zo he mun go to the work'us; I thought as I'd run down street an' tell 'ee, but I can't bide no longer vor tes all ov' a caddle to hoam, wi' Ben an' the children. Zo good night to 'ee mis'ess."

The messenger of ill tidings was gone, but the old woman stood there on the threshold awhile, half-dazed, trying to realize what she had heard. Then she turned away from the sunset glow, and with slow, uncertain steps went back into her low, dark room, and sat down on the nearest chair, with her hands crossed on her knees, and her eyes fixed blankly on the expiring embers of the hearth.

"Poor old Gideon!" Her heart ached for him, as she thought of the sudden blow which had struck him down in the midst of his work and left him helpless and desolate in his old age, with only the workhouse before him, unless—the sudden thought almost took away her breath. What if she, Louie Cole, were to take upon herself the burden of his suffering and misery? He was no kin to her, and what claim had he upon her devotion? The answer was not far to seek.

She rose slowly from her seat, and took down from the shelf a little old rosewood workbox. The key hung to a black ribbon round her neck, and when she had unlocked it, she wiped her tear-dimmed eyes, and put on her spectacles. Then with reverent touch, she took out a bundle of old letters, yellow with age and worn with frequent handling. They were all in the same cramped handwriting, on thin foreign paper, and were signed, "David Seamark." In those two words, the romance of her life was centered. As she looked back through the mist of years, it seemed only the other day that she was a young girl, in the prime of life and hope, walking side by side with her lover David, through the pleasant meadows all aglow with daffodils and primroses, or by the winding river's bank.

Could she ever forget the cruel parting before he went out to Australia, with kindled energy, to earn a home worthy of her? Next rose up before her the vision of those long, weary years of patient waiting darkened by

news of ill-luck and sickness and disappointment; till there came a day which brought her the joyful tidings that the long-expected home was ready, and money was enclosed for her passage out. With trembling fingers, the old woman unfolded that precious last letter, and read once more the record of a far-off flash of happiness.

"Feb. 17, 1861. Barra Creek."

"My dear Louie,—
"This come hopen to find you well as it leve me at this present. An now the Lord be praised all our troubles be come to an end for I've a saved a tidey bit o' money an have a got a nice house only waiten for a mis'ess, an a garden an a field, and my dear Louie you muss come as sune as ever you can. An I send the money for the journey an a paper wi all perticklars how to get here, an the things as youll want, I sez to mysel Louie be a comen an tes too good for to be true. So no more at present from
"your loven David."

She knew it all by heart, every word of it, and so too with the fatal message which followed it so quickly, not much more than a week later. This was in another handwriting and was sent to Louie Cole, because hers was the only address found, when David Seamark was lying dead of the pestilence, "which killeth in the noonday." Of the poor fellow's savings, nothing ever reached England, but Louie's journey money paid for a headstone to his memory in Combe churchyard.

Thus ended the story of her love, but a broken heart is not always a fatal complaint, and Louie Cole lived on with her mistress until that home was broken up by death when, drawn by old associations, she came back to settle in her native village. The Seamarks, who were Chilterton people originally, had all passed away except the eldest brother, Gideon, who had come to live in Combe and worked for Farmer Yeatman. He was not popular in the village, being of a shy, reserved nature, but Louie proved a kind friend to him for the sake of old memories. She washed and mended for him, took him a bit of hot dinner every Sunday, and did many another neighborly office to make life more pleasant for the lonely old man. But now all this had come suddenly to an end.

The sentence had gone forth that he would never more do a stroke of wark; he could earn no wages to pay the rent of his poor cottage, and there was nothing before him but the shame and dependence and restraint of the workhouse.

"No, no; Gideon idden never brought so low as that!" cried the poor woman, in eager protest, as the restlessly clasped and unclasped her hands. "My David, he would'n never forgive I, if so be I let en go to the work'us, an' they such decent v'oks. Never shall my dear lad's brother want for a roof over's head, and a crust o' bread so long as I've got a one. Sam Bewley shall take I in to Mere to-morrow, an I'll bring Gideon back to hoam, vor to bide wi' me; so I will."

Having once made up her mind which way her duty pointed, Louie's practical common sense asserted itself to carry out her plan. She must settle it all at once, for she would have to start in the carrier's van betimes in the morning. Of course the old man could be brought back to his own home for one night, if necessary, and that would give her time to make her cottage ready to receive him. If he were helpless and partly paralyzed, he could never mount the steep ladder-like staircase to the upper chamber, and his bed must be put in the corner, against the wall where the old black bureau stood. She looked round the familiar room, which it had been her pride and pleasure to keep in such perfect order, and she thought of Gideon's own untidy den, darkened with the fumes of his pipe.

She glanced at the varied row of plates and cups on the polished dresser, each one of which had a history of its own; the shining brass candlesticks and cooking pots, the china ornaments, dog and shepherdesses who seemed to stare at her all unmoved. Then her eyes wandered to the pictures on the walls, mostly memorial cards with urns and weeping willows, and here and there a more cheerful colored print, and her own elaborate sampler hanging in the place of honor; till at last she paused before a little dark silhouette, cut out in black paper, which must have been a dismal caricature of the David she had loved. But for all that it was her most valued possession, and recalled those happy days, for the memory of which she was prepared to sacrifice the rest of her life.

In the low, broad window stood a row of flowers in pots, scarlet geraniums and petunias and musk; carefully tended treasures, which yet did not add much to the cheerfulness of the room, for all the blossoms were turned away towards the light. Above them hung the cage of her canary, the only living companion of her peaceful home.

All that long summer night, old Louie never closed her eyes; and clearly before her rose up the vision of what this deed of charity would mean for her. Her scanty pittance, which barely kept the wolf from the door when there was only herself to provide for, would have to be shared with a sick man who would need more dainty fare than hers. The quiet days when she had only her own simple way of life to arrange, and was free to dwell undisturbed in the cherished past—all these were at an end; her time, her strength, her very life would henceforth be devoted to the service of poor Gideon, of whom rumor whispered that he was not easy to live with at the best of times. Yet the brave little woman never dreamt of drawing back; she saw her duty before her, and went dauntlessly forth to meet it, in silent heroism.

It was nearly eleven o'clock next morning and every nook and cranny of the quaint old High Street at Mere was flooded with sunshine, when the carrier's van from Combe Dallwood rumbled over the stones, and the old white horse pulled up at the great gate of the County Infirmary. It had been a hot, dusty drive, and poor Louie Cole had shrunk back silently in her corner from the noisy talk and merriment of her companions, who were coming in to the Saturday Market, full of spirits and bent on business or pleasure. She was glad to get down and stretch her cramped limbs, even amid the bustle and hurry of the passers-by in the crowded street. For now, that she had reached her destination, a sudden nervousness came over the old woman, and the plan which had seemed so simple at a distance, needed all her courage to carry out. Only by a strong effort

could she summon up assurance enough to cross the broad courtyard, and ring the porter's bell.

There were other people waiting, and she had to take her turn.

"In the Ambrose Ward, first floor, second door to the right," were the official's curt directions, in answer to her timid inquiry.

With trembling steps, the shrinking pathetic figure passed up the staircase and along the stone corridor until she came to an open door, and paused there for a moment, irresolute. A tall, pleasant faced nurse, in a grey uniform and white cap, came forward to meet her.

"Who do you want to see my good woman?" she asked kindly.

"Ef 'ee please, ma'am, I be come to fetch Gideon Seamark, as were took wi' a fit yesterday. An' doctor he sent word as the poyes could do he no good."

"Ah yes, you are quite right; he is in this ward, and we were expecting his friends to-day. Poor fellow, it is a sad case, and I fear he will never be any better. Are you his wife?" she added in a tone of quiet sympathy.

A faint flush like a gleam of wintry sunset, passed for a moment over old Louie's face as she replied simply:—"No, ma'am, I beant no kin to he, but tes vor the sake ov' old times I be come to take 'en hoam. My poor David wur brother to he," she added in a lower tone, as though no further explanation were needed.

The nurse looked for a moment in silence at the patient face, deeply lined with past sorrow, and with a flash of insight she seemed to understand the pathetic story. Yet with her long experience as sister in charge of the ward, she felt it was her duty to speak one word of warning, of cold worldly common sense.

"My poor friend, do you know what you are doing?" she asked, as with a movement of impulsive sympathy she grasped her visitor's withered, toil-worn hands. "Do you fully understand what a heavy burden you are taking upon yourself? you who are not even a relation? The old man may live for years, becoming even more helpless and trying; already one side is quite paralyzed, and his speech is affected.

"Ah, dear lady, doant 'ee try to put I out o' heart!" interrupted Louie. "T'es my duty, an' I see it plain afore me, an' so God help me, I'll find et a blessing too. Why look-y-see, tidden no more than you good ladies be a doin' here wi' the sick v'ok from year end to year end!" she added in a tone of conviction.

There was no more to be said, and Sister Ambrose could only smile back at the brave little woman, whose unconscious heroism struck a responsive note in her inmost soul. Then she gently led her across the ward between the double row of spotless beds, to a big easy-chair, near the window, in which leant back an old man with a bushy mass of grey hair, and a sunburnt face, whose strongly marked features were deeply seamed and wrinkled by the wear and tear of a long hard life.

He looked up vaguely at first, but a smile of welcome dawned over his face as he recognized the new-comer.

"Why, ef tidden Louie Cole!" he exclaimed, in a thick, indistinct voice. "T'es just about good ov' 'ee vor to come an' zay good-bye, avore I be tookt to the work'us."

"No, no, Gideon, doant 'ee be afear'd; thee shadden never go there so long as I do live," cried his friend, with confident assurance.

But the old man only shook his head. "Why didn't 'ee hear tell as all they doctors here caant do I nar a mo'sel o' good? I beant never to do no more wark, an' never earn no more wage."

He paused for a moment to take breath, and then with a fresh outburst of bitterness, he continued: "An' my Club, over to Chilterton as I've paid in reg'lar, a matter o' vorty year, why he be gone to mash! zo there idden nought save the work'us vor I to die in."

There was silence for a moment, then old Louie turned to Sister Ambrose with a wistful look of apology and said: "He do be a bit hard o' hearing."

So she quietly moved round to the other side, and sitting down on the window bench, she began in a clear, distinct voice, not loud but penetrating: "T'es all right, Gideon, there idden no call to trouble about that there work'us, vor you be comen hoam to bide down street, along o' me. Sam Bewley have a ben told to call here for we, this arternoon, an' he'll keep a snug corner for 'ee as tes market day."

The quiet tone of assurance in which this was spoken, and the mention of the carrier's van, brought conviction to the old man's mind. Even so, in the far-off past, did the sight of the wagons which had come from Egypt to fetch him, set at rest the last doubts of the patriarch Jacob.

Gideon Seamark made an effort to raise himself, and looked his old friend full in the face.

"Why Louie! Be thee a goin' to take all the bother o' mindin a ram-shacklen wold body, same as I be come to? wi' all the v'oks a tellen what a fool thee bist?"

"Nay let 'em tell," was the cheerful reply, "tes well for they to laugh as wins!"

Still there was something on his mind, and presently he added in a lower voice: "An' look-ee Mis'ess, can 'ee make room vor my poor Topsy? Her idden no great shakes to look at now, but La' bless 'ee, there never wur a finer tabby, an' us could'n be parted now, arter all these years."

The old woman nodded a smiling assent; for that he should think so fondly of his old cat at such a moment, almost took away her power of speech.

Gideon sank back on his propped-up pillows, with a sigh of complete, ineffable satisfaction. His lips moved and Sister Ambrose stooped down to catch the broken words:—"T'es tar'ble good ov' 'ee, Louie, to let I bide down to Combe wi' all the v'ok I knows, an' a kind body to mind 'er. Tidden as ef I wur wuth et, but there, I zee et plain—tes all vor the love thee bore to our David."

PLEADING IGNORANCE.

Struggling Author.—My dear, this writer says it is a great trial to be the wife of a genius.

His Wife.—I shouldn't wonder. Geniuses must be very cranky in some ways, but of course I don't know anything about it.

THEN CAME A CHANGE.

"What is Whiffett's reputation for veracity?" asked Ricketts of Gazzam.

It was excellent until he began to try to make century runs on his wheel, replied Gazzam.