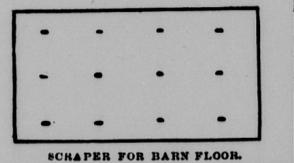
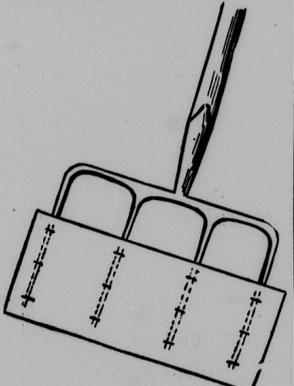




Poor Work in Shredding.
Considerable complaint has been made against the corn shredder because the shredded material, especially the coarser parts of the corn stalk were not properly cut to pieces. Pieces of stalk from six to ten inches long formed the greater part of the waste that accumulated in the mangers. Much of this material, if reduced to fineness, would be eaten by stock, and a great deal of actual feed could be saved. However, it is true that a portion of the stalk can hardly be reduced by the shredder and cutter head sufficiently to be eaten by animals. A grinding process that crushes as well as cuts is necessary to do this. But the common shredder may be made to do much better work than it has done the past season.

Where the shredder has started fresh with sharp, keen knives, firmly set, the thrashed material was made a great deal finer than after the machine has been used for a considerable length of time without the knives being sharpened. Shredder owners are doing great injury by allowing such careless work. Instances are known where the knives of the shredder have not been looked after during the entire season's work. Such poorly cut up fodder brings the shredder into disrepute; and the districts that have been imposed upon will likely have very little fodder shredded the coming season because the machine did not increase the value of the fodder.—Indianapolis News.

Barn Floor Scraper.
The stable scraper is a very handy tool to keep in the barn, and can be easily and inexpensively made. The foundation is an inch board, five inches wide and about eight inches longer than the width of an ordinary four-tined



SCRAPER FOR BARN FLOOR.
fork. Quarter-inch holes are bored in the edge of the board the same distance apart that the tines are on the fork. These holes should be about three inches deep, and pass out of the board on the side. The lower edge of the board is beveled behind, which forms a good scraping edge.

The Corn Binder.
Saving the corn fodder has become a most important operation on most of the farms. The drought has cut short the oats and hay crop, and the deficiency in coarse fodders must be supplied from the corn fields. The silo has proved to be of great value in converting the green fodder into ensilage. It is not only the most economical method of handling the crop, but gives the best food, not for dairy animals only, but for the production of beef. The making of ensilage is not generally practiced throughout the country. The stover is put up as dry fodder, and is so fed. Corn-cutting has become so general that it is often difficult to obtain help for harvesting the crop, either for the silo or in the dry state. The improvements made in the corn binder have made it a practical and valuable implement for cutting the fodder. The binder not only hastens the work of cutting the forage, but by tying it into bundles the material is much more easily handled when put on wagons or when placed in the shock. The feeding into the shredder is more regular where the fodder has been given to it in bunches of equal size.

Keeping Milk Sweet.
If the milk is to be delivered in good condition to the consumer during the summer months, it must be thoroughly cooled and aerated and kept cool, says Hoard's Dairyman. These steps are absolutely necessary with all milks during the hot weather. A great improvement can also be made by looking carefully after the cleanliness of cows, stables and milk utensils, as there is a great difference in the keeping quality of clean and dirty milks. The whole question of keeping milk sweet is in providing a clean article, kept cool and well aerated. Preservatives should not be used under any condition.

Biennial Plants Seeding First Year.
We have occasionally been called upon to tell our neighbors why some of their plants that are not supposed to produce seed until they have been re-

set in the ground after they have made one year's growth should have gone to seed the first season. They are roots, and we have seen it happen in beets, carrots and celery, probably more often in the latter than in the others. In every case where we have had an opportunity to examine the plants that thus seeded prematurely we have found that some cause had checked the growth in the early part of the season, and when it began a new growth it began as if in its second year to develop the seed stalk instead of perfecting the root. Celery set in the ground too early, or allowed to be chilled in the hotbed where started, does this very frequently, but we have seen beets and carrots do it when a severe late frost went over them after they were well up, and we think parsnips are liable to do so. But we have found beets and carrots doing so when examination showed that they had been injured by having been touched with the hoe or weeder, or possibly injured by worms or other insects. There is no remedy but to pull up and destroy the plant. Seed produced on such a plant is valueless for sowing another season.—American Cultivator.

Robbing Farms and Families.
The American Sheep Breeder says that it is quite possible that an ounce of mixed food, such as corn and oats ground together, with an equal quantity of wheat middling or bran, will add an ounce or more to the weight of lambs after they are four weeks old, if given daily in addition to other proper food, and as they grow older this amount may be increased, with nearly a corresponding increase in weight gained. To exchange a pound of grain, costing about one cent, for a pound of lamb worth fifteen cents seems to be a trade that almost any farmer would be willing to make, but we have seen those who boasted that they never bought any grain. They did not raise lambs or chickens, sold but little and bought less, and saved money, but we would not have accepted their farms and the money they had accumulated and agreed to make the farm as good as it was when they received it. Such farmers are usually robbers, robbing the land of its fertility, robbing their families of the comforts of life, and their children of the pleasures of youth and nearly all that is desirable in life, unless the children forsake the farm and establish a home where they may earn more, expend more and enjoy more of life.—New England Homestead.

Crop-Bound Fowls.
There is more or less trouble with crop-bound fowls in the summer, and during this season it is due nearly always to the bird having got some improper substance in its crop. If the bird is a valuable one and worth treating the best plan is to take her between one's knees with a cup of sweet scalded milk in hand and gently force some of the milk down the throat, at the same time working the crop gently back and forth with the fingers. After giving a few spoonfuls of the milk then give a dose of Rochelle salts in a little milk. If this does not bring relief, go back to the first treatment, which will be more effectual after the use of salts, and will relieve the trouble in the majority of cases. The difficulty may have been caused by eating too much grit or gravel, or eating considerable mud when picking up corn or other grain thrown to the hen. After feeding the fowl as indicated she should be fed bread moistened in milk for a day or two and kept in a clean coop, where she can get no food except that given her.

Value of Forage Crops.
Dry pastures and hot weather bring little terror to the farmer who has planted liberally of such crops as will give forage in midsummer. The early sweet corn is in condition to feed and the sorghum is coming into head. With these crops to supplement the pastures, the live stock will receive little check in the production of meat and milk from lack of food during the hot weather. If stock is compelled to hunt for a living all day in weed fields with little grass, a loss may be expected, one that will be difficult and expensive to make good later on. The hogs and sheep, as well as the cows, will appreciate an extra ration during the warm days. While the stock is running on pasture, if shade, food and water are together, noon is an excellent time to do this special feeding. At this time of day the animals will be in the shade near their watering place, and extra feed may then be given without disturbing them in the cool morning and evening when they enjoy feeding on the grass. A check in growth, whether in summer or winter, is always an actual loss to the owner.—Exchange.

Nails in Apple Trees.
Among old-time fruit-growers there exists an opinion that by driving nails in apple trees certain diseases and attacks by insects are avoided. The only possible good that could come from driving a nail into a tree would be that which might come from the rust which would accumulate on the nail, and it is only sensible to suppose that this rust would be of no value anywhere, except in its immediate vicinity. It is a well-known fact that rust has no effect, good or otherwise, on the sap of a tree, and as for the rust in any way destroying or preventing insect life, it is not so.

Profit in Sheep.
Under proper handling it costs little to keep a small flock of sheep on the general farm, and they return enough to more than pay good interest on the investment and something over in the shape of wages for the owner. Then the lambs and mutton, whether shipped to market or killed for home use, must count as clear gain.

FRIEND OF THE SPARROWS.

Tells of the Good They Do to Their Human Slanderees.

I see in magazines and papers so many articles denouncing the sparrow that I feel it my duty to tell of my 35 years of close companionship with this little chap. While I read the accounts of his alleged murders and depredations on other birds, I have yet to see any such disgraceful acts on his part.

My experience with him has proved to me that he is the farmer's best friend. He is the first little fellow in the spring to pounce on and destroy all the caterpillars and insects that are destructive to the farmer's crops, and he keeps pecking away at these vermin until the grain is ripe. Then the crops are so far advanced that they are safe. All he then asks in return for the benefit he has been to the farmer is a little grain to carry him through the fall and winter.

So few know the reason for the introduction of the English sparrow to this part of the world that I wish to give it. Many years ago the streets of New York were lined with beautiful trees. In the spring, as soon as they began to put on their summer foliage, they were attacked by an ugly looking green worm called the inch worm. These would devour all the leaves, leaving the tree perfectly bare, and then hang from the trees in millions by a silken thread. They became such an intolerable nuisance that a great many people had the trees cut down to get rid of them. After introduction of the sparrow this nuisance ceased to exist. He did his work bravely and well. This certainly is a proof of the benefit he is to the farmer. You can depend on it that he destroys more harmful insect life in proportion than he takes back in pay for what grain he eats. While now and then there may be cases of disgraceful acts on his part to others of our most beautiful feathered creatures, he has always behaved himself in my presence.

At this writing he is living in peace with the catbird, robin, brown thrush, oriole and many other birds in and around my premises. The little chap cheers us with his presence and cheery note all winter. Thousands of them are killed off by deep snow, cold and want of food. Not only is he a benefit to us in the way above mentioned; he is a shield, a protector to all the other birds, in that he gives up his life to tramp cats, hawks and the boy with the rifle. If he were not with us surely all the other birds would have to suffer.

I saw an article in one of our magazines advising the wholesale destruction of the sparrow with grain soaked in poisoned water. What a terrible combination that is to get in the hands of some idiot who would use it and destroy numberless other feathered songsters. Last winter one of my neighbors soaked corn in poisoned water and scattered it for the destruction of crows. He killed a bevy of quail. I saw the dead birds. Besides, many other birds have suffered with the quail.

Before condemning this little chatter-box make your home with him summer and winter, and the more you see of him the more you will see his value to the farmer, and you will find on the long, cold and dreary days in the country in winter, when all the other warblers are in the sunny South, these little innocents will brighten your pathway with their cheerful notes.—Forest and Stream.

Wealth of the United States.
Wealth of the United States is computed every ten years from the census returns. The total wealth in 1850 was put at \$7,135,750,228, or \$308 per capita, and in 1870 at \$30,068,518,507, or \$780 per capita. This amount rose in 1880 to \$43,642,000,000, or \$870 per capita, and again in 1890 to \$65,037,061,197 or \$1,036 per capita.

Expert statisticians estimate that the amount for 1900 will be at least \$90,000,000,000, or nearly \$1,200 per capita. When it is considered that the latter amount represents accumulated savings of \$6,000, or nearly four times the average of 1850, for every family of five persons, it is evident that the world is growing rich at an astonishing rate under the operation of machine production.—World's Work.

Throwing the Shoe.
The peasants of Southern France have the credit of originating the familiar custom of throwing an old shoe after the newly-wedded pair. It was, moreover, the rejected suitor who first made it popular. The peasant bride is conducted by her friends to her new home, while the young husband is made to halt at a couple of hundred yards from the house. If there is a rejected suitor, he then arms himself with an old wooden shoe and flings it, with his aim, at the bridegroom as he makes a dash for the house. When the shoe is thrown it is understood that the last feeling of ill will has been flung away with it.—New York Tribune.

Frenchmen in Paris.
Statistics show that of the population of Paris only 26 per cent are natives, whereas the figures for the other principal capitals of Europe are as follows: St. Petersburg, 40 per cent; Berlin, 41 per cent; Vienna, 45 per cent, and London, 65 per cent.

"Brick-Tops."
Three out of every 135 English speaking people have red hair.

When the average person decides to do anything rash, he lets his best friend know in time to order that his best friend may put a stop to it.

Bookish people know so many uninteresting things.

The Doctor's Dilemma

By Hesba Stretton

CHAPTER VIII.

Awfully fast time sped away. It was the second week in March I passed in Sark; the second week in May came upon me as if borne by a whirlwind. It was only a month to the day so long fixed upon for our marriage. My mother began to fidget about my going over to London to fit myself out with wedding clothes. Julia's was going on fast to completion. Our trip to Switzerland was distinctly planned out. Go I must to London; order my wedding suit I must.

But first there could be no harm in running over to Sark to see Olivia once more. As soon as I was married I would tell Julia all about her. But if either arm or ankle went wrong for want of attention, I should never forgive myself.

It was the last time I could see Olivia before my marriage. Afterwards I should see much of her; for Julia would invite her to our house, and be a friend to her. I spent a wretchedly sleepless night; and whenever I dozed I saw Olivia before me, weeping bitterly, and refusing to be comforted.

From St. Sampson's we set sail straight for the Havre Gosnell. To my extreme surprise and chagrin, Captain Carey announced his intention of landing with me, and leaving the yacht in charge of his men to await our return.

"The ladder is excessively awkward," I objected, "and some of the rungs are loose. You don't mind running the risk of a plunge into the water?"

"Not in the least," he answered cheerily; "for the matter of that, I plunge into it every morning at L'Anversette. I want to see Tardif. He is one in a thousand, as you say; and one cannot see such a man every day of one's life."

There was no help for it, and I gave in, hoping some good luck awaited me. I led the way up the zig-zag path, and just as we reached the top I saw the slight, erect figure of Olivia seated upon the brow of a little grassy knoll at a short distance from us. Her back was towards us, so she was not aware of our vicinity; and I pointed towards her with an assumed air of indifference.

"I believe that is my patient yonder," I said; "I will just run across and speak to her, and then follow you to the farm."

"Ah!" he exclaimed, "there is a lovely view from that spot. I recollect it well. I will go with you. There will be time enough to see Tardif."

Did Captain Carey suspect anything? Or what reason could he have for wishing to see Olivia? Could it be merely that he wanted to see the view from that particular spot? I could not forbid him accompanying me, but I wished him at Jericho.

Olivia did not hear our footsteps upon the soft turf, though we approached her very nearly. The sun shone upon her glossy hair; every thread of which seemed to shine back again. She was reading aloud, apparently to herself, and the sounds of her sweet voice were wafted by the air towards us. Captain Carey's face became very thoughtful.

A few steps nearer brought us in view of the grass, and had spread his nets on the grass, and was examining them narrowly for rents. Just at this moment Olivia, gathering some broken meshes together, but listening to her, with an expression of huge contentment upon his handsome face. A bitter pang shot through me. Could it be true by any possibility—that he had heard the last time I was in Sark?

"Good day, Tardif," shouted Captain Carey; and both Tardif and Olivia started. But both of their faces grew brighter at seeing us. Olivia's color had come back to her cheeks, and a sweeter face no man ever looked upon.

"I am very glad you are come once more," she said, putting her hand in mine; "you told me in your last letter you were going to England."

I glanced from the corner of my eye at Captain Carey. He looked very grave, but his eyes could not rest upon Olivia without admiring her, as she stood before us, bright-faced, slender, erect, with the folds of her coarse dress falling about her as gracefully as if they were of the richest material.

"This is my friend, Captain Carey, Miss Olivia," I said, "in whose yacht I have come to visit you."

"I am very glad to see any friend of Dr. Martin's," she answered as she held out her hand to him with a smile; "my doctor and I are great friends, Captain Carey."

"So I suppose," he said significantly—or at least his tone and look seemed fraught with significance to me.

"Tardif," I said, "Captain Carey came ashore on purpose to visit you and your farm."

I knew he was excessively proud of his farm, which consisted of about four or five acres. He caught at the words with alacrity, and led the way towards his house with tremendous strides. Olivia and I were left alone, but she was moving after them slowly, when I ran to her, and offered her my arm, on the plea that her ankle was still too weak to bear her weight unsupported.

"Olivia!" I exclaimed, after we had gone a few yards, bringing her and myself to a sudden halt. Then I was struck dumb. I had nothing special to say to her. How was it I had called her so familiarly Olivia?

"Well, Dr. Martin?" she said, looking into my face again with eager, inquiring eyes, as if she was wishing to understand my varying moods.

"What a lovely place this is!" I ejaculated.

More lovely than any words I ever heard could describe. It was a perfect day, and a perfect view. The sea was like an opal. The cliffs stretched below us, with every hue of gold and bronze, and hoary white, and soft grey; and here and there a black rock, with livid shades of purple, and a bloom upon it like a raven's wing. Rocky islets, never tread by human foot, over which the foam poured ceaselessly, were dotted all about the changeful surface of the water. And just beneath the level of my eyes was Olivia's face—the loveliest thing there,

though there was so much beauty lying around us.

"Yes, it is a lovely place," she assented, a mischievous smile playing about her lips.

"Olivia," I said, taking my courage by both hands, "it is only a month till my wedding day."

Was I deceiving myself, or did she really grow paler? It was but for a moment if it were so. But how cold the air felt that of a first plunge into chilly waters, and I was shivering through every fiber.

"I hope you will be happy," said Olivia, "very happy. It is a great risk to run. Marriage will make you either very happy or very wretched."

"Not at all," I answered, trying to speak gaily; "I do not look forward to any vast amount of rapture. Julia and I will get along very well together, I have no doubt, for we have known one another all our lives. I do not expect to be any happier than other men; and the married people I have known have not exactly dwelt in Paradise. Perhaps your experience has been different?"

"Oh, no!" she said, her hand trembling on my arm, and her face very downcast; "but I should have liked you to be very, very happy."

So softly spoken, with such a low, faltering voice! I could not trust myself to speak again. A stern sense of duty towards Julia kept me silent; and we moved on, though very slowly and lingeringly.

"You love her very much?" said the quiet voice at my side, not much louder than the voice of conscience.

"I esteem her more highly than any



other woman, except my mother," I said. "Do you think she will like me?" asked Olivia, anxiously.

"No; she must love you," I said, with warmth; "and I, too, can be a more useful friend to you after my marriage than I am now. Perhaps then you will feel free to place perfect confidence in us."

She smiled faintly, without speaking—a smile which said plainly she could keep her own secret closely. It provoked me to do a thing I had had no intention of doing, and which I regretted very much afterward. I opened my pocketbook and drew out the little slip of paper containing the advertisement.

"Read that," I said.

But I do not think she saw more than the first line, for her face went deadly white, and her eyes turned upon me with a wild, beseeching look—as Tardif described it, the look of a creature hunted and terrified. I thought she would have fallen, and I put my arm round her. She fastened both her hands about mine, and her lips moved, though I could not catch a word she was saying.

"Olivia!" I cried, "Olivia! do you suppose I could do anything to hurt you? Do not be so frightened! Why, I am your friend truly. I wish to heaven I had not shown you the thing. Have more faith in me, and more courage."

"But they will find me, and force me away from here," she muttered.

"No," I said; "that advertisement was printed in the Times directly after your flight last October. They have not found you yet; and the longer you are hidden the less likely they are to find you. Good heavens! what a fool I was to show it to you!"

"Never mind," she answered, recovering herself a little, but still clinging to my arm; "I was only frightened for the time. You would not give me up to them if you knew all."

"Give you up to them!" I repeated bitterly. "Am I a Judas?"

But she could not talk to me any more. She was trembling like an aspen leaf, and her breath came sobbingly. All I could do was to take her home, blaming myself for my cursed folly.

Tardif walked with us to the top of the cliff, and made me a formal, congratulatory speech before quitting us. When he was gone, Captain Carey stood still until he was quite out of hearing, and then stretched out his hand towards the thatched roof, yellow with stonecrop and lichens.

"This is a serious business, Martin," he said, looking sternly at me; "you are in love with that girl."

"I love her with all my heart and soul!" I cried.

The words startled me as I uttered them. They had involved in them so many unpleasant consequences, so much chagrin and bitterness as their practical result, that I stood aghast—even while my pulses throbbed, and my heart beat high, with the novel rapture of loving any woman as I loved Olivia.

"Come, come, my poor fellow," said Captain Carey, "we must see what can be done."

It was neither a time nor a place for

the indulgence of emotion of any kind. It was impossible for me to remain on the cliffs, bemoaning my unhappy fate. I strode on doggedly down the path, kicking the loose stones into the water as they came in my way. Captain Carey followed, whistling softly to himself. He continued doing so after we were aboard the yacht.

"I cannot leave you like this, Martin, my boy," he said, when we went ashore at St. Sampson's; and he put his arm through mine.

"You will keep my secret?" I said, my voice a key or two lower than usual.

"Martin," answered the good-hearted, clear-sighted old bachelor, "you must not do Julia the wrong of keeping this a secret from her."

"I must," I urged. "Olivia knows nothing of it; nobody guesses it but you. I must conquer it!"

"Martin," urged Captain Carey, "come up to Johanna, and tell her all about it." Johanna Carey was one of the powers in the island. Everybody knew her; and everybody went to her for comfort or counsel. She was, of course, related to us all. I had always been a favorite with her, and nothing could be more natural than this proposal, that I should go and tell her of my dilemma.

Johanna was standing at one of the windows, in a Quakerish dress of some grey stuff, and with a plain white cap over her white hair. She came down to the door as soon as she saw me, and received me with a motherly kiss.

"Johanna," said Captain Carey, "we have something to tell you."

"Come and sit here by me," she said, making room for me beside her on her sofa.

"Johanna," I replied, "I am in a terrible fix!"

"Awful!" cried Captain Carey sympathetically; "but a glance from his sister put him to silence."

"What is it, my dear Martin?" asked her inviting voice again.

"I will tell you frankly," I said, feeling I must have it out at once, like an aching tooth. "I love, with all my heart and soul, that girl in Sark; the one who has been my patient these."

"Martin!" she cried, in a tone full of surprise and agitation, "Martin!"

"Yes; I know all you would urge. My

honor, my affection for Julia, the claims she has upon me, the strongest claims possible; how good and worthy she is; what an impossibility it is even to look back now. I know it all, and feel how miserably binding it is upon me. Yet I love Olivia; and I shall never love Julia."

A long, dreary, colorless, wretched life stretched before me, with Julia my inseparable companion, and Olivia altogether lost to me. Captain Carey and Johanna, neither of whom had tasted the sweets and bitterness of marriage, looked sorrowfully at me and shook their heads.

"You must tell Julia," said Johanna, after a long pause.

"Tell Julia!" I echoed. "I would not tell her for worlds!"

"You must tell her," she repeated; "it is your clear duty. I know it will be most painful to you both, but you have no right to marry her with this secret on your mind."

"I should be true to her," I interrupted somewhat angrily.

"What do you call being true, Martin Dobree?" she asked, more calmly than she had spoken before. "Is it being true to a woman to let her believe you choose and love her above all other women, when that is absolutely false? No; you are too honorable for that. I tell you it is your plain duty to let Julia know this, and know it at once."

Nothing could move Johanna from that position, and in my heart I recognised its righteousness. She argued with me that it was Julia's duty to hear it from myself. I knew afterwards that she believed the sight of her distress and firm love for myself would dissipate the infatuation of my love for Olivia. But she did not read Julia's character as well as my mother did.

Before she let me leave her I had promised to have my confession and subsequent explanation with Julia all over the following day; and to make this the more inevitable, she told me she should drive into St. Peter-port the next afternoon about five o'clock, when she should expect to find this troublesome matter settled, either by a renewal of my affection for my betrothed, or the suspension of the betrothal. In the latter case she promised to carry Julia home with her until the first bitterness was over.

(To be continued.)

Wild Boars in Windsor Park.
It is stated that the wild boars in Windsor great park are to be shot, by order of King Edward. The herd was presented to Queen Victoria by the Prince of Wales during his tour in India. The animals have largely increased in numbers, and have had to be killed off periodically. They have been a considerable source of attraction to visitors, but they are dangerous, and several people have narrowly escaped injury.

When a brakeman has curly hair, his associates call him "Curly." But if he is over six feet tall, however, they always call him "Shorty."