S. Kann, Sons & Co's.

FALL

Announcement!

WE BEG TO DIRECT YOUR ATTENTION TO OUR LARGE, NEW AND VERY DESIRABLE STOCK OF

FALL AND WINTER

GOODS,

WHICH WE HAVE NOW READY FOR YOU. THE INCREASE IN OUR BUSINESS THE PAST YEAR ENCOURAGED US TO NOT ONLY ENLARGE OUR STOCK FOR THIS SEASON, BUT ALSO TO PUT IN A HIGHER AND MORE ATTRACTIVE GRADE OF ALL THE LATEST AND MOST CORRECT STYLES IN GARMENTS AND DRESS GOODS.

Our Stock of Ladies' and Gents' Furnishings

Is also replenished with everything new and desirable in that line.

Carpets, Oil Cloths, Rugs,

And sundry other articles for domestic use, are also newly replenished.

THERE'S HARDLY ANYTHING IN OUR LINE THAT YOU CANNOT BUY RIGHT HERE AS WELL AS YOU CAN IN BALTIMORE OR PHILADELPHIA AT EVEN LOWER PRICES, FOR WE ARE NOT UNDER THE EXPENSE THAT LARGE CONCERNS IN LARGE CITIES ARE, AND WE AIM THIS SEASON TO STIL FURTHER REDUCE.

This season we'll sell you a very fin quality of

Silk-Finished Henrietta a 45 cents.

These you'll find in every conceivabl shade that is new and desirable.

All-Wool Ladies' Cloths,

full 36 inches, in all the new shades, only 40 cents.

A Lot of 42-inch All-Wool Plaids,

Decidedly stylish this season, only 50c.

Lots of 6¼ lb. White Blankets

large size, we'll give you at $1.69. These are wonderful values. Lots of Double White Blankets will be sold as low as 88 cents. No one need go blanketless this winter at this price. Lots of fine all-Wool Blankets—Red, Blue, Gray and White—at a scale of prices that is easily reached.

Several Cases of Very Fine Print Remnants,

each piece makes a dress, guaranteed fast colors, at 5 cents a yard, can't be bought in the State of Maryland under 8 cents a yard.

A Lot of Extra Heavy Canton Flannels

at only 10 cents, and hundreds upon hundreds of small Wears, Ladies' and Gents' Furnishings, &c., at equally low prices.

We would call especial attention to our new stock of

Ladies' and Misses' Wraps and Jackets,

in all the new styles. Lower prices were never made on finer garments.

S. KANN, SONS & CO.

POPULAR STORE,

11 E. Main St., - Westminster, Md.

AMERICAN SENTINEL.

VOL. 55, NO. 39. WESTMI[redacted]ATURDAY MORNING, OCTOBER 6, 1888. ESTABLISHED 1833.

Select Poetry.

THE BLESSING OF SONG.

"What a friend we have in Jesus,"
Sang a little child one day,
And a weary woman listened
To the darling's happy lay.

All her life seemed dark and gloomy.
All her heart was sad with care;
Sweetly rang out baby's tremble—
"All her sin and griefs to bear."

She was pointing out the Saviour,
Who could carry every woe;
And the one who sadly listened
Needed that dear Helper so!

Sin and grief were heavy burdens
For a fainting soul to bear;
But the baby, singing, bade her
"Take it to the Lord in prayer."

With a simple, trusting spirit,
Weak and worn she turned to God,
Asking Christ to take her burden,
As He was the sinner's Lord.

Jesus was the only refuge,
He could take her sin and care,
And he blessed the weary woman
When she came to Him in prayer.

And the happy child, still singing,
Little knew she had a part
In God's wondrous work of bringing
Peace unto a troubled heart.

—Christian Observer.

Select Story.

THE TIDE-LAND.

Describing How Miss Vanderpool Came to Her Own.

Flora Haines Morehead, in Argonaut.

Miss Vanderpool came down the steps of her lodging-house and stood looking about her with an expression of discontent on her high-bred face. It was not a very genteel lodging-house, and it was not in a very genteel quarter. The paint was off in patches, and one of the faded green blinds hung on a single hinge. The steps were worn and the little front area was used as a depository for wood and coal. There were a pair of dirty faces at the basement windows, and outside of the door Sairy Ann, the Gorgon's eldest, watched her depart with undisguised curiosity. Possibly she knew that Miss Vanderpool's tent for her single room, third story in the rear, was a week overdue. She might have been stationed there as a

[redacted]

plishments now that she must earn her daily bread? Why did every one take advantage of her and cheat her, down to the pawnbroker who had lately taken the last piece of jewelry saved from her financial wreck? She was faint and hungry, and a gnawing pain that was new to her, reminded her that she had lived on bread and water for six weeks, and that she had been on short rations for the last few days. If she had been a soldier, now, she could have withstood it right valorously, for there was martial blood in her veins. But to suffer it for no heroic reason, in nothing but the common way! The thought humiliated her, and she put it aside.

She was walking down the street lined with low cottages, when she stepped before one of the poorest and meanest, where a stunted lilac, just budding in the front-yard, gave evidence of some little refinement on the part of the occupants. But it was not this that attracted Miss Vanderpool's attention. Floating from the door-knob she beheld a little piece of thin white crepe, tied with narrow ribbon, the wan banner of sorrow. This was the cottage where the two little girls had looked out upon her, with laughing faces, every day as she passed by. Only yesterday they had flung her kisses from the window. Now one was gone. The shock bore down upon her with all the sense of a personal loss.

She pushed the gate open and went up the steps. A woman opened the door and led her to a darkened room. It was the custom of the neighborhood to give free admission to visitors at such a time. In the little white coffin lay the younger of the two children. Beside it sat the father and mother, the woman sobbing quietly, the father with his arm about her, and in his lap the remaining child, who had cried herself to sleep in his arms.

"I am so sorry;" said Miss Vanderpool, gently; "is there anything I can do?"

The moment she spoke she regretted it. The mother uncovered her face and looked up piteously, then shrank from the strange visitor.

"Nothing, nothing," she moaned, "unless you could bring back my child."

"There, there, Emily," said the man, patting her kindly; "Don't take on so. It's hard on all of us. We've got to bear it together."

Miss Vanderpool's eyes were wet as she went silently out of the room and closed the door behind her. It had been a mistake, her coming. They had plainly resented the intrusion. If only she could have done something for them, could have given them some testimony of her sympathy. To lose a little life that was part of your very own must be hard, but doubly hard when poverty and want are attendant upon sorrow. The room had been so bare. There was not a flower about the coffin. Miss Vanderpool had been accustomed to see grief smothered in costliest offerings, and this little creature was going to her last rest without so much as a flower in her little hands—the tiny hands that had thrown kisses to her but yesterday.

She wished that she could get some flowers for that dead baby. It was April, and there were none in the city gardens, just recovering from the shock of a severe Eastern winter. She had no money to buy them from a florist. Up in the great house on the bluff that had been her home there was a conservatory, and in it there was a magnificent climbing rose that she had planted herself years gone by, and nurtured into a vigorous growth. Out of all the riches that she had lost, at this moment she wished only for one of the large pointed buds, with its petals half unfolded, shut in a little bower of green leaves. But that was out of the question. Not even for this sacred purpose could she ask any favors from the people in the house on the hill.

A little later and there would be plenty of wild flowers outside the the town. The violets always came first. Nay; it was already the last of April, and with the soft wind blowing and the clear sunshine of the past two weeks the violets must be already out. She quickened her steps at the thought. A little brook ran through the town and cut a narrow channel down the bluffs, on its way to the sea. Near the foot of the bluffs there was a narrow bench of land stretching between the hills and the tide-lands, and there beside the brook she had gathered early spring violets since childhood. If she walked quickly she could easily get there and back again before the night had closed down.

To reach the place she had to pass through the business portion of the town. Walking swiftly along, looking to neither right nor left, she was surprised to have some one accost her:

"Miss Vanderpool!"

It was John Ashton, whom she had not seen since the day that she had found her father's name dishonored and herself beggared and homeless. He had asked her to be his wife and she had refused. Was it because she had known him as a poor boy, born in the lowest walks of society, while the Vanderpools had inherited the wealth and high standing of many generations? Or was it because she elected to bear her poverty and disgrace alone? She flushed now as she recognized him.

"One minute," he said.

"Not now. I can not wait," she insisted, and he stepped back without a word.

What could he wish to see her for? She remembered what he had said that time. "If you were rich and honored I should have been too proud to address you." She had resented the speech then. Recalling it now she could not help admitting that it did honor to John Ashton the boy, the little ragged fellow who used to do chores about her father's house, picking up an education at the public schools, devoting himself to her service on holidays. John Ashton, the man, was a separate entity, and she had never trusted herself to analyze her impressions of him. He was liked and trusted by all men, and very probably admired by women. She knew his errand to the place. He was a celebrated engineer now, and had come down to take charge of a great project for reclaiming the tide-lands. People called the enterprise "the march of improvement," but Miss Vanderpool hated the march of improvement and did not care for benefits to commerce, but liked best the wide stretch of salt marshes with their rusty vegetation, their black pools and flitting fogs. She was coming to them now, for her path lay along their border, and soon she was beside them, and drew a long breath, inhaling the fresh ocean air with its briny smell. She looked out to sea, where a luminous glow along the horizon commemorated the going down of the sun, and sullen clouds above presaged the gathering of a storm.

[redacted]

which reflected the distant glow in the sky, she saw the tall chimney of a steam derrick and a low, barge-like shape that seemed to be anchored in the mud. She did not give herself much time to speculate now. Night was fast falling, and a little ahead she saw the tiny brook she sought. But think a moment! Was it the right place? She hesitated for an instant in doubt and perplexity, then looked quickly about to determine her bearings by some familiar landmarks. There on the bluff were the square outlines of her old home, just visible against the sky, and there, off to the right, far beyond, were the harbor lights. Just a little further on, then a sharp turn to the left, a climb up the rocks to the little bench that lay between the bluffs and shore, and she should find the flowers. She pressed hurriedly on to gain the place before it should be wholly dark. She knew a way up the bluffs, a steep and winding path, by which she could gain the lighted upper street when she was done. If only she could once find the flowers, the dewy, spring flowers, with their faint, sweet odor and their fresh, sheltering leaves! All worldly thoughts seemed to fall away from her, the weight of disappointment and care was lifted from her heart, and she felt like an eager child, bent on her innocent quest.

But what was this—the solid ground giving way beneath her feet, every step taking her deeper and deeper into a bottomless ooze, her feet drawn down and held as if by leaden weights! This was not the way it used to be along the banks of the little brook. In a moment the full horror of the situation flashed upon her. Deceived by the light or rendered careless by her own wandering thoughts, she had strayed further from the town than she had supposed, and what she had mistaken for the little brook was really an estuary of the sea, bordered by treacherous bogs—a portion of the great waste of tide-land which the company were seeking to reclaim. Quick and sharp came other recollections. She remembered that children had been lost there when at play. She remembered that every now and then some man or woman had mysteriously disappeared from sight and knowledge, and it had been whispered about that they had been last seen walking along the border of the tide-lands. But these were people of the lower classes, about whom the Vanderpools had given themselves little concern. She remembered now—ah, how sharply!—that she had read with a curling lip that portion of the young engineer's argument before the harbor commissioners, when he was pleading for permission to go on with his work, wherein he had advanced, as one of his strongest pleas, that many lives would be saved by the completion of the enterprise. And now she, Judith Vanderpool, the last of her name, was about to succumb to this most unheroic destiny. It was better so. She would have chosen this very way of death, if she might. She had been tortured by one dread, over and over again, during these years of poverty and privation, and she gave a little hysterical laugh as she remembered it now. If she should have broken down and died in the midst of her unsuccessful struggle she had not the where-withal to buy her funeral shroud. Now no one would know, no one would care.

O, the terror of it! Not death. Many were there who would know her and greet her gladly; father, mother, brother, friends of her childhood—the only friends she had kept. But that last thought! To drop out and never be missed; to leave behind her not a human being who would care. Why should she grieve over it now? She had, of her own will, separated herself from all human interests; she had never cared for human companionship or love.

But, oh God! she did care. She knew it now. Face to face with this terrible and lonely death she had come to a knowledge of herself. Nursing her foolish pride and family traditions, measuring all the world by false standards, she had wronged herself most of all. What was it that had so touched her in the humble home she had just left, breaking down the barriers of her own reserve, drawing her on and out of herself, until she longed to claim some little part in it? What was it but the glad and sacred atmosphere of pure family affection? O, her life had been empty; empty. And the one human love that she might have had—she knew it now—would have made her a happy woman, she had scornfully rejected. O, if she could only live her life over, if she could but take up its tangled threads again with cleared vision and humbled heart.

It was then that she sent up her first and only cry for help. Hitherto she had been silently resigning herself to death with a calmness and dignity befitting a Vanderpool. Now a prolonged and mournful cry went out over the marshes, startling the seagulls, which rose and wheeled aimlessly about against the darkening sky. The cry was taken up and answered far out on the marshes. There was a sudden commotion about the barge, lanterns flashed outside, and by their light she could see dark forms moving about. But she—she was sinking, sinking—

* * * * *

When she came to herself she was in her own little room. It was very quiet and comfortable. Her landlady flitted in an out, with a look of honest concern on her careworn face. So the world was not so hard, after all. She—the Gorgon—seemed glad that her delinquent lodger was alive, and said no word about the rent overdue. Somebody had pulled the lounge, on which she lay, up to the stove, and there was a fire there, the first for many weeks, for her own fuel had given out in February, and she had been freezing ever since—freezing heart and body. And what was the brewing on the stove, that sent such a delicious fragrance through the room?

"Now, my dear," said the Gorgon, pouring something into a clumsy earthen cup and handing it to her, "just you take this cup of coffee and bit of hot roll, and it'll set you up in time. You've been looking peaked and mis'able this long time. Folks that feeds theirselves don't take no proper care. I've been thinking, this long while, that if you'd just take your living along of me and give pianny lessons to my Sairy Ann—but I hardly dared ask it, you being sich a fine player and she having no instrument unless you'd maybe let her come up and practice times when you was in and could watch and see she didn't dirty the pearl keys or spile it——" Homely and rough as she was, there was a delicate flush on her thin cheek as she checked herself in her bold presumption.

"Didn't dare ask it!" Miss Vanderpool would have acted as the child's nurse, scrubbed floors, washed dishes, if she had asked it. The backbone of her pride was broken. But what was the woman saying now?

"And now, if you'd let me tidy up a bit and make things half-way decent, for the gentleman's been waiting to see you this long time."

"The gentleman! What gentleman?" Miss Vanderpool, was not used to callers. The landlady answered her inquiry:

"Why, who but him that saved you! Him that brought you here in his arms, looking like dead and all covered with mud—and a pretty sight you were, Miss Vanderpool. And awful work it was cleaning you up, if you be a lady."

What made Miss Vanderpool's face aflame and her heart beat so? It might be any one of a thousand men. There was no reason, no reason in the world, she told herself, why it should be any particular one.

Yet, as luck would have it, it was John Ashton! No not luck. Chance rarely favors such men as he. All that they have is won by hard endeavor, and persistent faith and dogged watchfulness. Luck is more apt to buffet them, to call out all the slumbering forces in them and show the stuff of which they are made. He had turned and followed Miss Vanderpool at a respectful distance, that afternoon he had met her in the street. It was getting late, and he had some old-fashioned notions, now almost out of date, prejudicial to a woman's going about at night, unprotected, upon the streets. When he saw the lonely direction in which she was tending, he had followed still more resolutely, for he knew the character of the men along the water-front better than she. And who could tell whom she might meet in that wretched place at such an hour? When she stopped to look seaward he had gone down over the marsh, both because he had some instruction to give to his foreman and because she would discover him in turning back. He had been first to hear the wild, beseeching cry, and to realize its purport; to start out with a party of men provided with lanterns, planks, ropes, everything needful; to man a boat and row fiercely up the slough, flooded at high-tide, directly to the spot where a human life—so precious to him, was going out; to throw himself out upon the morass, bracing himself on the planks they had brought, and finally, like the true knight he was, to gather the unconscious girl in his arms, covered with mud as she was, and wrapping his coat about her, bear her to the place she called her home.

But John Ashton was not the man to claim any recompense for the service he had rendered. The more serious her peril, the greater the risk he had run on her behalf, the more need that he should be delicate and distant in all his bearing toward her; that he should try to make her forget he had ever pressed any claims upon her. He would not have come now had he been his own free agent. She saw that the moment he opened the door, and shrank from her own thoughts. He surmised the look upon her face and interpreted it in his own way. So she disliked him so much that it galled her to think that he had put her under such obligations. Well, well! If he had had time to consider, it might have been better to have left it to one of the men, or, at least to have concealed his own connection with it.

"You are feeling better, Miss Vanderpool?"

There was not a note in his voice beyond the ordinary requirements of courtesy. She answered him in kind.

"Quite well now, I thank you. Won't you be seated," motioning him to a chair.

"I thank you." But he still remained standing, his hat in his right hand, his left hand—was it her fancy, or were the fingers clenched?—hanging easily beside him.

"I came," he said, in a matter-of-fact way, "about a matter of business. I tried to speak to you on the street, to-day. You were not willing to listen. You were right. It was not the proper place."

"You mistook. It wasn't that. I was preoccupied; I couldn't have talked then—with any one," she explained, hurriedly, and in a low voice. He scarcely noticed her words and did not at all comprehend them, but went on, in a formal business way:

"A matter of business. I was authorized to conduct some negotiations with you. They concern the Vanderpool estate."

Weak as she was and broken as she was, she could not suppress a little laugh, only half mirthful, but wholly sarcastic. The Vanderpool estate! What had there been of it, since she came into possession of it, but an inextricable tangle of debt and litigation, lapsed contracts and forfeited rights!

"Now that we have got ready for work we are in a position to negotiate for the tide-lands. There are seventy acres belonging to the Vanderpool estate. I am empowered to make you the following offer."

He drew a paper from his pocket and named a sum which took Miss Vanderpool's breath away. Enough to restore the lost glory of the Vanderpools. Enough—more than enough—to buy back the old home where her mother had died and she was born, enough to restore her to the life of affluence to which she had been bred; enough to place her forever above the reach of the petty privations and racking cares that had sat so heavily upon her but yesterday. She raised herself up on one elbow and looked at him. Her eyes, always large, shone with an unnatural brilliance. He thought her exulting over her restoration to wealth and power.

"I won't ask you for an answer now," he said; "perhaps you would better consult a lawyer. May I say to the company that you will give your answer in writing?"

He was moving toward the door, not even waiting for her answer, for he had determined to give her no opportunity to refer to the events of the day. He was arrested by a single word:

"John!"

No woman ever speaks in such a way to a man she does not love, but the men do not always understand. John Ashton did not understand. He came back and stood by her side looking down doubtfully into the shining eyes raised to his own, then quickly turned away. It was only a man, after all, and he had some bitter recollections to steel him against any betrayal of weakness. Besides she was a rich woman now, richer than she had been in the days when he had assured her he would have been too proud to ask her to share his life.

"John, are you going—so!" He understood then; slowly at first, with a dawning comprehension of all the words meant to him and to her. Then Heaven itself seemed to open to him, as he gathered her into his arms.

Had any other Vanderpool ever made overtures to the man she loved? Would the cheeks of dead and gone Vanderpools have reddened with mortification could they but have witnessed this shameless betrayal of her heart! Somehow Miss Vanderpool was so happy that she did not care. And as for the money—

"It would have seemed like a curse if it had parted us, dear," she said.

SAFE WATER SUPPLY.

The Best Cistern Filter and Well-Wall for Farm Purposes.

Waldo F. Brown, in New York Tribune.

Properly made, the brick partition wall is, I believe, the best possible cistern filter. It should be thoroughly cemented on both sides for a foot or more at the bottom where the sediment will collect in the side of the cistern to which the water is admitted, and above that use the soft brick for the water to filter through. Such a filter is absolutely perfect. I would make the cistern large, so that a supply can be secured in winter and early spring when the rains are copious and cold, and I would have a manhole to each side of it. I recently learned a new method of walling wells, which is cheap, requires no skill, and insures the water against contamination from surface water. Instead of using stone or brick, glazed sewer-pipe is put in with joints cemented. The joints can be made absolutely water-tight and with a well from fifteen to twenty-five feet deep, as is usually the case, if the clay be tamped around the tile, as it should be, it would seem impossible for any leaching from the surface to reach the bottom. For economy, eight inch tile is generally used, and when these small tile are put in it is well to turn a small arch with brickbats to make a reservoir for water for the tile to rest on. When the well is to be used only for house purposes it is better to dip the water and draw it with a windlass than to pump it. Use a bucket of six inches in diameter, made of heavy tin, with a conical bottom, and arrange it with a piece of strong wire attached to the valve and coming to the top of the bucket so that you can open the valve and allow the water to run into a pail set under it, and there will be no lifting or pouring of the water from the well bucket.

In walling a well with tile or other material great pains should be taken to tamp thoroughly, especially as you near the top. The best clay should be reserved to use at and near the surface, and it should be raised a foot or two above the level and so graded that the water will flow away at once from the well. Another cheap and very satisfactory plan with wells, especially those for stock, in localities where the stone is near the surface, is not to wall at all, but arch with brick, starting the arch on the ledge. I have three wells finished in this way, two of them stock wells ten feet in diameter. In this, as in many other localities, we strike a regular ledge of limestone four to six feet from the surface, and here we cut a shoulder and start the arch. If the ledge is so far from the surface as to bring the top of the arch below ground, a neck of hard brick can be built up to the surface, and the arch should always be topped out with a large sewer pipe extending a foot or eighteen inches above ground; fit the pipe to the arch with cement so tight that not even a drop of water can enter and then fit a good cover of two-inch boards to the top of the sewer pipe, and you will secure your cistern from all sources. There are wells by the thousand in the country with old rickety wooden curbs, rotten at the foundation, and when the wells are cleaned there is usually found in the foot of sediment the skeletons of rats, dead toads and other things sufficient to turn the stomach of a handsaw. I appoint each reader of this a committee of one to make a careful examination of the well curb and its connection with the wall.

A new alloy discovered by Herr Keith, of Brackenheim can be used very advantageously in the laboratory to replace vessels or fittings of ebonite, vulcanite or procelain, as it practically resists the attack of almost all acids and alkaline solutions. This alloy is a bronze, with the addition of lead and antimony, its composition being as follows: Fifteen parts copper, 2.34 parts tin, 1.82 parts lead, and 1 part antimony.

Milk is altered both in taste and appearance by the character of the food supplied to the cows. It is colored by madder and saffron, scented by plants of the onion tribe, and changed in taste by such articles as turnips. Certain food may give it medicinal properties, and milk thus medicated is proposed as a method of treating disease.

According to the naturalists wasps remember the locality of their nests just ninety-six hours.

Spooks and Specters.

Men now living can remember when every town in New England had several haunted houses and a score of ghosts. But some night the ghosts went away never to return. Perhaps these anecdotes, taken from the "History of Weare, N. H," may explain the cause of their departure.

One night John Hodgon, a strong-nerved, clear-headed man, was riding home on horseback from Hillsborough. The night was dark and windy, and as Hodgon came near his farm, he looked over into a cornfield, and saw, standing upon a knoll, something that for a moment made his flesh crawl. It stood still for a moment, then it disappeared, with a weird sound, and again returned to the knoll. The farmer soon recovered from his foolish fright, dismounted, climbed over the fence, and walked to the knoll. He found that his men had left a large basket in the field, which the wind blew up from a small hollow upon the knoll; then when there was a lull it would roll back.

An old shanty in the town was troubled with ghosts. Rappings were heard in an unfinished room over the family living-room. A strong-minded woman, Mary Peaslee, visited the shanty to hear the ghostly rappings. Shortly after her arrival, she heard, overhead, bump, bump, bump, then rap, rap, rap. She placed a ladder and went up into the unfinished room, where she found an old hen, whose feet and legs had been frozen. It could not walk without falling, and the falls made the bumping noise. The raps were caused by it picking up something to eat. That ghost was laid by carrying the hen to the room below.

In another haunted house there were queer noises and strange objects were seen flitting by the window. After several days, these wonders ceased, and then some one ventured into the uninhabited house. He found a dead cat, left alive by the former occupant. The cries and efforts of this cat to get out had suggested a ghost.

A POWERFUL MAGNET.

A most interesting electrical experiment has recently been made at the engineering station of the United States army at Willett's Point, L. I., by Major W. R. King, of the Engineer Corps, by which he transformed two fifteen-inch Rodman guns, weighing 50,000 pounds each, into an immense electro-magnet. The guns were placed side by side, and joined at the breech by a number of pieces of railroad iron. The guns were then wrapt separately by fine insulated copper wire, over eight miles of it being used. The wire used was an old torpedo cable consisting of forty small insulated wires bound together into a cable of about three-eighths of an inch in diameter. The electricity was obtained from a twenty-arc light Weston dynamo.

A number of experiments were made with this most powerful magnet, and it was found that a force of 20,600 pounds was necessary to overcome the magnet's attraction and draw the armature from it. A string of four fifteen-inch shells, weighing 320 pounds each, was suspended from one of the guns. It was discovered in the course of the experiments that there was a point in the bore of the guns, and seven and one-half inches from the muzzle, where the magnet repelled instead of attracting. Small pieces of iron were propelled from it with force, while a shell placed at that point was rolled slowly out of the gun until it dropped from the muzzle and was caught by the attracting force at the mouth of the gun.

It is thought that the power of the magnet would have been greatly increased if more wire had been used in the wrapping and if more railroad iron had been used in connecting the guns at the breech.

The small moth millers appear in May and later, and fly about seeking a place to deposit eggs. The eggs soon hatch, and during the summer the larvae feed upon the woolen fabric of furs on which eggs are laid. In the fall they go into the pupa state, from which they emerge as moths in due time. Some very particular house-keepers whip carpets both sprnig and fall. But in rooms little used one beating, or a careful examination and use of preventives around the edges, should suffice.

Many a good apple orchard has been injured because a few worthless wild cherry trees were permitted to grow and provide headquarters for the caterpillar. In every community where the authorities have enterprise enough to demand the destruction of weeds, the roadmaster should be made to destroy all wild cherry trees.

THE EQUINE QUICKSTEP.

A former resident of the South, where horseback riding was and is a favorite means of travel over rural roads, learned that the walking gait is not only easiest for both animal and man, but also most conducive to rapid transit on a long journey. This he proved particularly during far extended equestrian trips. He offers good advice, through "*The Connecticut Farmer*," as to teaching the quickstep, which is especially desirable for field work and heavy teaming.

"The walk may be said to be horses' leisure or resting gait, and they have not often much ambition to make time in it. If urged by word or whip, instead of holding the walk with a quicker and longer step they will break into a trot. It is the most difficult gait to teach to make the walk so much a second nature that the animal will sustain it all day, and day after day. The first point is, after a colt is bridlewise and accustomed to saddle or harness, allow it no gait except the walk; the trot and other gaits will come of themselves. Keep the colt on a walk whenever taken out for exercise, and, for a time, let it take its natural walk and aim merely to keep it steadily to its work and under control, and so do till it takes readily to it as if a business. Do not be in a hurry; be patient, be kind and gentle, for remember you are educating, not breaking, a young animal, and do not think it more precocious or intelligent than a boy, as men often seem to. When it has learned enough to move along as if chiefly intent on its duty, then by an accustomed word or sound of encouragement, begin carefully to quicken its steps.

"Don't be hasty or excite the colt; retain its confidence, for here the Spanish proverb will apply. 'To be fast, be slow.' With efforts to increase the rate of walking the colt will often do what is perfectly natural to it, break into a trot; then hold it up at once, even if to stand-still. Then start again carefully, keep the animal cool and confident and gradually urge on again. It will be found that soon it will try to trot again; but stop as before and repeat this process till it has learned to keep a certain rate of speed, as much as it will by the encouragement of the voice. Then the same method can be used to increase its speed by light touches of the whip or spur, until a light touch of the whip will only hurry, without breaking the walk, the rapid play of the feet, as they move with almost musical sound along the road. In this manner if followed with care, the speed can be increased until it reaches the limit of the animal's ability. After the habit of rapid walking is once formed any other gait can be taught."

The writer cites a number of interesting and encouraging instances, showing the possibilities of breeding and training to the rapid walk which insures so much gain in time and satisfaction. Four miles an hour was considered only a fair average, and forty miles was usually covered in a day; a large number would walk fifty miles in ten hours, and a record of six miles an hour was not so infrequent as to cause especial surprise.

"While living on the gulf coast in South Alabama in 1838 to '41 I was acquainted with several horses of the latter walking speed. It was my pleasure for a long time to ride almost daily a large iron-gray horse, a thoroughbred, which carried me a constant easy gait of six miles per hour. It was almost ruined a few years before from a long run caused by excessive fright, and I was told by the family that in its prime, and before the injury, it would walk seven miles an hour. Some reader may incline to think this a little apocryphal, but it is true. In May, '41, I started on a journey Northward of nearly 1,700 miles with a well-bred horse, that, three months before, had finished a journey of 1,100 miles, a walk being the only gait used on either journey. It was a pleasure to mount into the saddle and move off at the rate of five miles with a springing elastic motion. There was an exhilaration, a life about it that no slow-moving horse could inspire.

"This was true more or less the whole day, whether we made thirty or fifty miles. For four days in the State of Georgia I was accompanied by as many of the citizens who were in haste to reach home. Between a rather late breakfast and an early supper we rode each day about forty-five miles. My horse's steady walk led them much of the time moving in an easy pace. I have had two horses since that, one a colt of my own training, the other a 14 1-2 hand pony whose gait I improved, that would walk with ease fifteen miles in two hours and fifty minutes, and did it repeatedly, not as a test, but because my business required it twice a week. While returning late one evening a man came from his yard on a tall horse to do an errand four miles on my way. My pony's feet were flying in such rapid succession that the farmer, his horse on a slow trot, fixed his eyes on my pony's feet as if studying a problem, and finally burst out with the exclamation, 'She does walk, doesn't she.'"

©Maryland State Archives, msa_sc2900_scm2296-0564