The Boy Teacher.

He was very young, and but just graduated from college. He had his diploma, health, energy, ambition, and what often proves one of God's greatest blessings for man — an empty purse. He was obliged to get work immediately, but he did not want to teach school, although one in the country was offered him.

He could not see why he should be forced to eat the bread of bitterness. He did not understand why he must breast the whelming waves whilst others skimmed lightly over smooth seas. He could not know, in those early days, that often, when God wants to bring out the best in a man, he sends him into some wilderness awhile. He could not understand that a country school is good training ground, but he conquered himself for duty's sake, although the fight was against habit, taste, and desire, for he must replenish his depleted purse. By such needs is the fate of a life often decided.

You would not have called him a hero. Oh, no ! There was no clash of cymbals, no bugle's blast, no beat of drum, to announce his battle between his own ambition and stern necessity. But he fought a fight and gained a mastery over self, and said : "I will do whatsoever my hands find to do, and with all my heart."

How hard it was to leave home ! Mother's face looked so tenderly kind when we are going, and she is so brave ! The old home seems conscious of the coming change. The rooms reach out their comfortable walls, as if they wished still to enfold us, the windows blink and smile brightly at us. The hearth-fire seems to flash out a petition for us to sit longer by its comfortable blaze. How we dread the first night away from home, with only strange faces and unknown humanity round us.

But he was a manly boy, and faced the emptiness of his purse, the need of new clothing, the dreary blank at the beginning of his young manhood, and the work he had accepted, but for which he had no love, with the same grit and nerve that made him catch the hard balls, with broken fingers in the baseball game, rather than give up the field.

When the time came for the country school to open, he was at his post. It was in the days when the amount of whipping done in the schoolroom was the test of the capacity of the teacher—the days when the trustees "sized up" an applicant for the honor of "running the job of three months' school" more by the brawn of his arm than the brains in his head. The boys thought only of testing his physical powers and they came Monday morning to the old schoolhouse ready for the fray. But the boy teacher had hunted, fished, tramped miles and miles through the woods, and by the rivers, and played baseball and football, and his arm was strong, his nerve steady and true. Before the first month had rolled away, they had felt the power of his hand, the power of his will, and, better still, were compelled to acknowledge he was kindly and courteous when they attempted good behavior. With the exception of one girl, Mattie Warren, the schoolroom was in a state of subjection to the new master.

But Mattie was incorrigible. She openly defied him. She broke the rules daily. She threw paper wads, she whispered, she wrote notes, she came late, and went early—she did as she pleased. The young teacher talked to her kindly. He tried to appeal to her pride, to her principle, her better nature, but she continued in open rebellion.

He decided to expel her, and called up the three gray headed farmers, who composed the board of trustees.

"You can't expel her—that's just what she'd like. Thrash her," said one old trustee. "Why, half the school 'ud like to be expelled. That 'ud ruin everything, young man. Whip her. That's what she is used to. Her own folks can't do nothin' with her, without whippin' her," exclaimed another member of the enlightened board.

Mattie Warren was fourteen.

"I cannot whip a girl," said the young teacher, slowly, and with great determination.

"Well, you won't do much at teachin' here, if you can't whip girls as well as boys. We can't have none of this foolin' expellin' bisness here," was the comforting reply.

The teacher resolved to make one more appeal to Mattie Warren's better nature. Hardly a boy in the school would have openly defied the dark-eyed master at that time, but this girl delighted to play with fire. Heretofore, when a girl made herself disagreeable to the young master, he had only kept out of her society, and left her severely alone : but this was one he could not simply ignore—one whose presence, for the time, must be endured.

She was young, and even the oldest and wisest man has not always known how to manage a woman. To this inexperienced, yet earnest boy, was presented a problem no less difficult to solve because both parties were young. If he had only been a soul made for hire, he might have yielded, but born in him and increased by training, were the instincts of a gentleman.

The teacher made one more earnest appeal to Mattie Warren. He told her she simply could not defy him and his rules, and remain in school. As his pupil, she must obey him. She was immovable, and her eyes laughed back defiance into his resolute face.

What could he do ?

It was Friday. He went again to the trustees, and insisted upon dismissing the girl from the school.

"Whip her ; she must be conquered," said they.

"I cannot strike a girl. I will give up my position first," answered the boy teacher, with rising color and flashing eye, and the matter was laid over till Monday. All night the perplexed young educator tossed on a sleepless bed ; and when morning came, the question,—"What could, what must he do ?"—was still racking his weary mind.

Giving up his situation meant a great deal.

What could he do?

With sudden resolve, he determined to go home and spend the Sabbath. Home ! Mother ! God-given refuge for man from the cradle to the grave ! When cruel trials come, when the bitter stroke wounds, when the strong temptation assails, if a man still has home and mother, where, for one short hour, he can recover himself, he is safe. So the boy teacher thought that, if only he could rest one night with the shadow of home over him, and the face of his mother answering him in tenderness and sympathy; if he could see again the womanly courage of her eye, he would feel strong again. His mother had never failed him. She would not fail him then.

He had no conveyance. There was no railroad, but he had strong limbs and an iron will. These should take him home. Ten miles in an easy buggy, with a spanking team, does not seem far, but ten miles on foot, with a weary brain, and an aching heart, is a long journey and fearfully lingering.

When he dragged his boyish feet up the walk at home, and stepped inside the door, his face looked painful and haggard, and an anxious dread took hold of his mother's heart as she welcomed her son. She knew he was in trouble. A dozen fears passed through her mind. Could he have given up his work for want of grit ? Was he recording his first failure ? Or, oh, had hot hot, boyish blood caused him to strike down some human being, some pupil ? What could it be ?

But she asked no questions. She must comfort him first. She drew him a rocking chair near the big, old-fashioned fireplace. She took his hat. Caressingly did she smooth back his glossy hair. She even smilingly told him some town news. In a few moments the blessedness of home had covered him as with a sheltering wing, and he was his own self again.

"Mother," he said, "they tried to make me whip a girl."

"Well, you wouldn't do that, I know."

"No, mother, I wouldn't ; but the trustees say I must whip her or give up my position, and I told them if they continued to insist on it, I would resign."

"That's right, my boy. You were never reared to strike a woman, even in miniature. If they insist, give up the school."

"I will--but it means giving up clothes, overcoat, and money for everything."

How much misery lies bottled up for a boy just entering manhood, in these privations, few can realize without actual experience.

The grown man may face the world in seedy clothes, but the young one must be fairly "well groomed" to be comfortable.

"Never mind about the overcoat and new clothes," said the mother, and the half formed tears in her brave eyes made them beautifully tender. "Perhaps God will send a mild winter. Stand for the right and trust in Providence."

That was enough ; he was her own strong, gallant boy again.

"Let's have supper, mother," he said, "I'm as hungry as a wolf."

Refreshed by a hot supper, he went to consult one of his old college professors. God bless those noble teachers whose heart follows and whose interest in a boy continues long after he has left the college walls.

When the boy teacher entered the "Old Log Schoolhouse" on Monday morning, his resolve was ironclad, strengthened by the approval of his mother and the professor.

In the afternoon the trustees were to meet there and the schoolmaster was to announce his decision.

"I hope the pupils will make this day a pleasant one, as it may be our last together," the teacher said slowly, as the exercises began.

At noon a daughter of one of the trustees said : "Mattie Warren, I'd be ashamed of myself if I were you."

"What have I done to displease you, missy ?" was the defiant reply.

"Our teacher is going to quit school because you have behaved so. The trustees want him to whip you, and he won't do it, so he is going to resign this evening."

Mattie Warren turned suddenly away and took her seat.

As the last lessons were being ended the three trustees, stern advocates of the whipping process, came in to wait the leisure of the teacher.

The closing exercise was at length finished.

Suddenly, as if nerved by strong resolution, Mattie Warren stood up at her seat. Her proud little figure faced the august trustees and the whole school, and her clear gray eyes scintillated with brightness.

Few there will ever forget the look of her face as she said :—"Teacher, may I speak ?"

There was a hush as of death in the schoolhouse.

"Teacher !" The girlish voice was as clear as a bell. "I have been the worst girl in school ; if you'll forgive me, I'll be the best." The childish figure dropped into her seat convulsed with sobs.

There was hardly a dry eye in the room.

"By George, professor, you done right, and I'll stand by you clear through !" said one noble old trustee.

The teacher didn't resign. He had won his battle.—Katie A. Orgain, in Success.

WAYS OF COUNTERFEITERS

Soldier Makes Bogus Coins in the Barracks.

Coining the King's shilling in the King's barracks would seem to the uninitiated a more than usually hazardous method of pursuing an always more or less risky calling. It is, nevertheless, a fact that more than one maker of base money has ere now deliberately enlisted, not for the purpose of forsaking his evil ways, but with the double barreled design of hiding his tracks from possible pursuers while carrying on all the time his nefarious calling, says the London Telegraph.

A notorious case in point is afforded by the career of Kent, the at one time well known "king of coiners," who was actually arrested in a Portsmouth barracks clad in the uniform of a non-commissioned officer of the Royal Inniskilling Fusileers.

The man had enlisted—of course, in an assumed name—nearly three years previously, and by good conduct and attention to his military duties had risen to the rank of corporal. Yet all the while he had been busily turning out base coins of every description, and when his quarters were raided after the arrest a perfectly appointed miniature mint was discovered; and scattered about, in different stages of manufacture, more than a thousand pieces of bad money ranging from sixpences to sovereigns, were brought to light by the officer who effected the capture—Detective Inspector Fox of Scotland Yard.

Another similar but in some respects even more remarkable case was that of James Clifford, royal artilleryman and "sovereign sweater." This individual had been, in his boyhood's days, apprenticed to a wholesale firm of silversmiths, and had in that capacity learned all about electroplating. Afterward he used his knowledge to rob his fellow-workmen by "borrowing" the half-finished products of their handicraft and surreptitiously immersing them for more or less lengthy periods in a private acid bath which he had fitted up in his spare time in a disused attic.

Being detected, he enlisted in the artillery, and, his technical knowledge securing him a position in the armorer's shop, started "sweating" wholesale money paid in to the non-commissioned officer in charge. He had a long inning, but in the end suspicion was aroused. Whereupon he deserted, taking with him his uniform and a number of blank furlough forms which he had secured while acting as temporary clerk in the orderly room. These latter he filled up, forging the necessary signatures; and by posing as a soldier on leave and changing his lodgings at the end of every two months or so he managed to completely throw the police off their guard, while engaged all the time in debasing the currency of the country. He was captured at last, though more by a lucky accident that through the sagacity of the police, and received a well merited sentence of several years' penal servitude.

INSECTS THINK.

Insects think as truly as men do, although not, of course, on the same scale. This is the belief of M. Forel, a French neurologist, who has been making observations of ants and bees for relaxation. He thinks that, between the ideas of the naturalist who regards insects as mere automatons and those of the man who treats them as if they had human intelligence, there is a happy medium of common sense, and this he has tried to attain. His observations teach him that although most of the acts of insects can be explained by instinct, there remain what he calls "small plastic judgments," by which they avoid difficulties and steer their way between dangers. The directive faculty of bees especially, and their wonderful memory for places, can hardly be explained on the theory of automatism.

The King of Italy has 24 cupboards full of coins. He has been collecting since he was 12 years old.

FARM · FIELD AND GARDEN

FERTILIZERS.

In selecting fertilizers for grass land the farmer must take into account the season, for if he wants to apply a fertilizer in the fall he must not put on nitrogen in an available form because much would be lost during the winter by its passing into the air and leaching off, but if applied in the spring nitrogen as well as phosphoric acid and potash may be applied with safety, writes Mr. E. Bright. What materials shall I use to furnish the different elements of plant food ? For nitrogen, nitrate of soda, sulphate of ammonia and dried blood, For phosphoric acid, acid phosphate, dissolved bone, black and ground bone. For potash, sulphate of potash and muriate of potash are the cheapest forms we can buy potash in here ; but in Germany, where the potash rocks come from, they use kainite to a large extent.

Before buying or applying any fertilizer to a mowing the farmer must decide whether grasses or clovers are to predominate; because nitrogen applied to the soil will stimulate the growth of grasses, while phosphoric acid and potash, especially the potash, will favor the

GROWTH OF THE CLOVER.

The reason is the clover is able to get its nitrogen from the air while the grasses are not, so we can readily see why the clovers being supplied with nitrogen, phosphoric acid and potash will predominate over the grasses which are able to get phosphoric acid and potash only.

It seems best when applying fertilizers in the spring, to apply those which are directly available, as the grass makes an early, quick growth, and if insoluble fertilizers are applied they will not get around to work until the season of growth is over. Therefore, if I wanted to apply a fertilizer in the spring to a field where market hay or chiefly grasses were desired, I would apply nitrogen in the form of nitrate of soda 150 lbs., phosphate acid in the form of acid phosphate 75 lbs., potash in the form of muriate or high-grade sulphate of potash 200 lbs. But if I wanted to apply a fertilizer that would do for both a first and a second crop I would add to the above dried blood 100 lbs., ground bone 50 lbs., and 50 lbs. of sulphate or muriate of potash. In applying fertilizers on fields where clover is wanted I would apply a mixture in the fall furnishing phosphoric acid in the form of acid phosphate 75 lbs., ground bone 75 lbs., and potash in the form of sulphate or muriate of potash 150 to 175 lbs. This last mixture is very desirable on farms where stock is kept and the hay fed out as it promotes the growth of clover, which is the richest hay to feed and it is storing nitrogen in its roots and stubble all the while ready to help feed the next crop. This shows why mowings which cut large yields of clover for two or three years gradually turn over to grasses, it is because the clover keeps feeding the grasses more and more upon the nitrogen laid up in the roots, until the grasses get the better hold and

CROWD THE CLOVER OUT.

Home-made manures are used to a large extent on most farms as it appears to be cheaper to use them this way and buy fertilizers for the other crops than to use fertilizers on grass. But I think it would be better and cheaper for the farmer to use some fertilizer in connection with his manure, especially potash : as manure is generally quite rich in nitrogen and phosphoric acid ; and it having that composition it will promote the growth of grasses rather than clover if used to any extent. It is generally used in quantities of from 6 to 10 cords per acre, but it seems better to me for the farmer to use 3 or 4 cords per acre, and in addition use perhaps 200 lbs. of sulphate of potash. By so doing he will get a hay of more value to feed and save money.

In writing the preceding I have mentioned facts which I think ought to govern the use of fertilizers, both alone and in connection with manure. But the farmer to use them to advantage must, as in all cases, study his soil and the action of different substances upon it. If the agricultural colleges and experiment stations keep on helping other people as much as this college has helped me this winter, it will not be long before the farmer will see why he must study more and by so doing be able to use his manures and fertilizers to much better advantage.

COW LANGUAGE.

Successful dairying involves a good deal more than the expert use of scoop shovel and pitchfork. It requires but little intelligence to deal out so much feed to an animal three times a day, and if success along this line were based on mathematical measurements or weights there is no doubt but what all would be successful who engage in dairying. It is possible to take an authentic work on feeding standards, and even after giving this a close study make most disastrous mistakes in feeding. It is an easy matter to say that so many pounds of clover hay, in conjunction with so much corn and bran should be fed for every hundred pounds of live weight, but it is an entirely different proposition to feed this in a way that will give profitable returns.

The cow has a language of her own, and this should be understood by the man who attempts to handle her. One should learn to interpret what is meant by a dry, staring coat or harsh skin. These conditions may be brought about by overfeeding, irregular feeding, or underfeeding. Sometimes animals even when given good care get out of condition. Under these circumstances it is not always advisable to resort to free use of medicines. Foods properly compounded are nature's best cure-all. If one has been feeding too heavily on corn alone it is possible that the animal's system has become over-heated with this food, and change should be gradually made to foods containing more protein.

A LITTLE BRAN OR OIL MEAL. will supply the ingredients that are necessary in the production of milk, and in so doing it often follows that the animal's system is toned up. Sometimes cows get out of condition for lack of mineral matter. This may generally be prevented by a free use of common salt. It is also advisable at intervals to mix a little sulphur with the salt. The effect of this seems to be to open the pores of the skin, which is usually followed by a glossy appearance of the coat. A dry coat is always the result of a poorly nourished skin, and when the skin is in good condition the hair is generally an outward expression of this condition.

Regular watering is highly important. It often happens on dairy farms that rush of work during some part of the day interferes with this operation, and it generally results in decreased milk flow. When animals have been neglected in this way, they generally gorge themselves when opportunity presents itself, and this in turn tends to throw their system out of order. Regularity in watering, feeding and salting might be considered the fundamental principles in feeding for profit in the dairy. Animals, as persons, will not always consume exactly the same amount at each meal, and it should be the duty of the feeder to study the attitude of individual animals to their ration and guard scrupulously against putting them off feed. It is even better to allow them to go hungry rather than that they should be stalled. A man cannot expect the best results unless he will spend a little time around the animals between feeding times. It is impossible to put in so many words just what can be observed by keeping close watch of all animals, although if a feeder will make it a point to spend a little time in studying his animals each day he will undoubtedly soon be in a position to interpret their needs.

LOOKS INTO MAN.

M. Eykmann, a member of the Royal Academy of Amsterdam, has discovered a novel method by means of which it is possible, through the use of Roentgen rays, to obtain an exact photograph of any interior part of the body, even while the organs in that part are actively at work. In this way one can obtain a thorough knowledge of the movements of the heart, the stomach and the intestines. M. Eykmann has devoted his principal attention to the movements necessitated by the act of swallowing, and experts say that his investigations throw an entirely new light on the mechanism of this act, which is so simple, but which no anatomist has heretofore been able to explain clearly.

LOOKED LIKE WINNING.

A curious wager was recently made between two laborers. One of them was boasting of the steadiness with which he carried a load to any height. The conversation ended in a wager being made by the one that the other could not carry him in his hod up a ladder to the top of the building on which they were employed.

The disbeliever placed himself in the hod, and his comrade, after a great deal of care and exertion, succeeded in taking him up and bringing him down safely.

Without any reflection of the danger he had escaped, the laborer who had been carried paid the money, adding :

"To be sure, I have lost ; but about the third storey you made a slip—then I was in hopes !"

WHY IT WAS A NECESSITY.

A minister of a rural parish in Scotland observed one of his flock shooting a hare on the Sabbath. When catechising day came round, he questioned him as follows :

"John, do you know what a work of necessity is ?"

"I do," said John.

"Well, do you think shooting a hare on a Sunday a work of necessity ?"

"It is that," said John.

"How do you make that out ?"

"Weel, ye see, meenister, it micht be awa' on Monday," was John's canny reply.

We may not recognize out shortcomings, but it is pretty certain that our friends know them by sight.