THE FAMILY STORY.

A FOOTBALL HERO.

IT WAS a great cross to Mr. and Mrs. Bartlett that Roger was apparently quite devoid of any worthy ambition. Their two older boys were so utterly different. Fred had been graduated from Yale with highest honors, and Horace was making remarkable progress at the Scientific School; in fact, they were both exceptionally fine students, which made the contrast all the more striking.

For Roger was sadly unlike his brothers. He seemed to labor under the impression that he had been sent to college simply and solely for the purpose of learning to play foot ball. Apparently nothing else had power to kindle the slightest enthusiasm in his sluggish breast, and his father and mother argued and expostulated with him in vain.

"You are frittering away your valuable time," they argued again and again, "and are letting slip golden opportunities which, once gone, will never come back to you; and what have you to show for it all but a broken nose and a fractured collar-bone?"

"Is there any prospective benefit to be derived from these hours spent in scrambling after a foot ball?" his father questioned, severely; to which Roger merely responded in his usual off-hand style: "Why knows but I may be elected captain of the 'varsity team next year?"

"Is that the height of your ambition?" his parent returned bitterly. "I am terribly disappointed in you, sir. Are you to go on playing foot-ball forever and ever, or what do you propose to make of your life? Perhaps you think that your reputation as a foot ball player will prove an 'open sesame' to all desirable positions? Do you suppose that anyone wants a fellow who has willfully wasted his best opportunities? I had hoped to make a professional man of you, not a professional athlete, and had even aspired to seeing you some day in our leading law office with my old friend, Wilkinson Smalley, but it's no use. Smalley wants only young men of the highest promise," and Mr. Bartlett sighed wearily.

"It does no good to talk to Roger," he confided to his wife afterward, "for hardly ten minutes had elapsed after I had been remonstrating with him about the evils of foot ball before he inquired if I wouldn't bring you down to see the game on Saturday, and informed me that he had saved two tickets for us."

Mrs. Bartlett regarded her husband helplessly. "What did you say to him then?" she queried.

"I told him 'certainly not,'" Mr. Bartlett exclaimed warmly, "and I expressed my surprise at his daring to suggest such a thing. Show me some lasting benefit, or any abiding good, that is to be derived from this ridiculous game, I told him, and then come to me to abet you in such folly, but not till then."

And so Mr. and Mrs. Bartlett failed to witness that memorable game in which their youngest son gained for himself such enviable laurels. Once in the field, Roger was like one transformed. Keen, alert, cool, rising splendidly to every emergency, no one would have known him for the same slow, indifferent, easy-going specimen of humanity who grieved the ambitious souls of his parents by his small aptitude for Greek.

Not that Roger was by any means a dunce, for his class standing was fairly good, but what pained his father and mother was the recognition of what he might have accomplished had it not been for the arch-enemy, foot ball.

The great game over, the victorious team hastened back to their gymnasium with all possible speed; they had some little distance to go, as the gymnasium was not very near the ball grounds, so that in order to reach it they were obliged to traverse the center of the town and cross the railroad tracks.

Roger, who had been detained a moment or so longer than the others, reached the station a short time after they had crossed, and found the platforms crowded with people who were returning from the game, mingled with those who were alighting from incoming trains. As he stepped upon the platform he became conscious that something unusual was going on, and he immediately perceived that the eyes of the multitude were riveted upon a figure half-way across the tracks, a figure pausing there in bewilderment.

"There's a train coming each way," somebody gasped; "why doesn't he get off the track?"

The station agent and one or two other officials were shouting loudly but the man, who was old and very deaf, appeared thoroughly dazed. As he was preparing to step upon the track nearest him he caught sight of one train coming down upon him, and he now staggered back and was about to plunge in front of the other downcoming express, when suddenly something very unexpected happened.

As the crowd of bystanders shrank back with horror-stricken faces, convinced that they were about to witness the horrible fate which must instantly overtake the old man, a figure in a much-begrimed canvas jacket sprang out from among them, and clearing the tracks at a bound alighted beside the swaying form of the other.

A shudder, and a wave of pitiful regret swept over the motionless crowd. "He can never drag him back in time," they breathed; "they will both be killed—oh, the pity of it!"

But our football man had no thought of dragging the unsteady figure in front of either approaching engine. In an instant he had tackled the man and thrown him flat upon the ground between the tracks, for all the world quite as if he had been an opponent on the football field; then he dropped lightly on top of him and lay there motionless, while the two trains thundered past on each side of them, and the crowd stood waiting spell-bound.

In much less time than it takes to describe the episode it was over, and what might have been a tragedy had proved to be only a bit of melodrama after all; yet as Roger jumped up and pulled the old man on to his feet, applause and cheers louder than any that had greeted him on the football field rang in his ears.

Abashed and quite overwhelmed by such an ovation Roger made haste to elbow his way through the crowd, and in so doing nearly overthrew his own brother Fred, who happened to be standing directly in his path.

"For heaven's sake was that you, Roger?" he cried, confronting him in astonishment.

"Do let me get out of this," his brother responded impatiently, "they needn't make such a fuss because I knocked the old duffer over," and he bolted in the direction of the gymnasium.

Saturday night generally brought the scattered members of the Bartlett family together, as the collegians always made a point of coming home to spend Sunday under the parental roof tree.

On this particular Sunday evening all were assembled before Roger came in. Fred was all agog to describe the scene that he had witnessed, but he unselfishly held his tongue. "I'll not spoil his story for him, but will give him a chance to do justice to it," he mentally ejaculated, as he watched his brother swallowing his soup with unruffled composure.

But Roger said nothing about the vital subject, and Fred looking at him with increasing surprise as he judicially set forth the respective merits of the opposing football teams, and called attention to their most vulnerable points.

"I'll turn in early to-night, I think," he yawned, as he withdrew from the dining room. "I put pretty solid work into the last half of that game," and he leisurely wended his way upstairs.

"I wish that Roger would put a little solid work into something else," his father volunteered, as he disappeared from the room.

At this Fred, who had in times past repeatedly scoffed at his brother's athletic proclivities, instantly fired up.

"Father," he burst forth, "you're making a big mistake about Roger. He's got more genuine stuff in him than all the rest of us put together, and if it's football that's done it, the sooner we all go in for the game the better;" and then he proceeded to give a graphic account of the afternoon's experience, which caused his father to blow his nose loudly and repeatedly, while his eyes glistened with happy pride, and sent his mother weeping in search of the sleepy athlete, who couldn't understand what he had done that was worth making such a fuss about.

A few days later Mr. Bartlett received a note from his old friend Wilkinson Smalley, which ran somewhat as follows:

"Dear Bartlett—I hear that your Roger is going in for the law, and if so, I want him. When he gets through with the law school you can hand him over to me, for he's just the material that I'm on the lookout for, and you may well be proud of him.

"He scared me out of a year's growth the other afternoon, at the station, the young rascal, but in spite of that, I wish you would tell him to come round and take dinner with me some night, for I want to talk to him.

"With kind regards to Mrs. Bartlett, believe me, ever your friend,

"WILKINSON SMALLEY."

When Roger came home the following Saturday, his father handed him the note, remarking: "I'm afraid I haven't appreciated your football, old man, but I'm going to do better in future; and, by the way, Roger, I hear that you're to play in the game at Springfield next week; is that so?"

Roger nodded.

"Very well, then," Mr. Bartlett continued, "your mother and I would like to have you get us the best seats that can be bought, for we've set our hearts upon going up to see you make the first touchdown."—Toledo Blade.

Freaks of Photography.

I have read, with the comments thereon, the account of the spirit photographing of a child's foot upon a window glass. I have something equally strange to offer. My father-in-law, Emanuel Ryder, lives a trifle over two miles north and east of here. He and his family are stanch spiritualists. In the fall of 1879 they had a valuable horse called Nellie, which was quite a favorite. It took sick with colic, I think, and just before it died sat upon its haunches with the forelegs hanging down, then dropped over dead. Although the day was clear the sun did not shine on that (the west) side of the house, a few rods from which, in front of a window, the horse died.

About five months afterward the lower right-hand pane of glass in the lower sash of that window began to look smoky, and when the sun shone direct on the glass the correct picture of the horse was depicted in the sitting posture mentioned. This remained so for ten years. In the fall of 1889 the glass became clear and the picture faded away, and in place were five diagonal lines, which remained about six months and disappeared. The glass began to look cloudy or smoky again, and the profile of the horse appeared as before, and is there to this day. It does not look like a flaw in the glass, but as if pictured in the glass. When the sun does shine in a direct line on the glass the image cannot be seen, but in the night, if a light is held against the window, it can be seen by a person on the outside, and vice versa. This picture has been seen by hundreds and is apparently a mystery to everybody. The fact of this phenomenon remains just the same, but the query is open for answer: How, why and by what was the picture of that dying horse photographed on that window pane?—Nye, Ore., letter to the Progressive Thinker.

Bursting Fly-Wheels.

The bursting of a fly wheel is almost unheard of in England, notwithstanding the high speed engines we now have running, yet in the United States fly wheel casualties have become a matter of weekly report. In England we have many thousands of high speed cast iron fly wheels and very large wheels up to sixty tons weight running with very high periphery speed, and they all run safely, and yet in the States they say: "The sudden advent of the electrical apparatus and its high speeds found people making fly wheels of cast iron, with a narrow factor of safety, or, indeed, no factor of safety at all, if we consider the impossibility of detecting inherent strains and imperfections in this material. No one can know the value of material molded into form at a temperature of 2,000 degrees and then cooled down to a 40th of this temperature, nor can they judge internal structure by surface indications. The fact is that cast iron is not suitable material for fly wheels that are to be driven at high speed, nor is it necessary to make them of this material. There is not even the claim of cheapness in their favor, if the methods of making such wheels of wrought iron and steel were once worked out."

Twenty years ago a Scotch firm, who had to make a large fly wheel for a spinning mill, riveted up a box rim, made from rolled plates, and filled it with cemented masonry or "grout," and did a very sensible thing.—London Engineer.

Loneliness of Arctic Ice Fields.

On these island hunting trips an ominous silence reigned. We were then having alternate day and night, and the spirit of the approaching months of darkness seemed to hold the day in thrall. The weird desolation and loneliness of the great peaks; the interminable ice-caps, lustrous and cold under the gray waste of cloud; the wide, mossy stretches, thick-set with irregular boulders of many hues, and thickly starred with white, pink, purple and yellow flowers; the absence of life; the windless hush—all these wove a web of awe about one's mental perceptions, and made the world in which we walked seem a part of strange dreams.—Century.

Fire Burns Thirty-Eight Years.

There is a burning coal mine at Summit Hill, near the Town of Mauch Chunk. The fire, which was started by a tiny accident, has raged in this mine since 1858, and all the trials at extinguishing it have failed.

"Why does a woman always call her purse a pocket-book?" "I don't know, unless it is because she carries in it a memorandum telling her where to find her pocket."—Chicago Record.

SCIENCE AND INVENTION

Escape from a Meteor.

A meteor, weighing nearly four and a half pounds, fell in an orchard near Namur, in Belgium, on April 13, narrowly missing a young workman. The meteor penetrated twenty inches into the ground.

Electro-Magnetic Velocity.

Recent experiments by Monsieur Blondot on the rate of propagation of an electro-magnetic disturbance along a wire showed, according to one series of tests, a velocity of 184,183 miles per second, and according to another series, in which the distance traversed was nearly twice as great, 185,177 miles per second. The velocity of light is about 186,300 miles per second.

The Swinging Earth.

It is known that the poles of the earth, instead of remaining fixed in position, revolve in small circles, or curves which are nearly circles, in a period of 427 days, and that another motion of revolution, considerable shorter, also affects the position of the poles. The cause of this "wobbling" is not known, but Prof. Simon Newcomb has recently suggested that it may be due to currents in the oceans and in the atmosphere affecting the equilibrium of the globe.

The Traveler's Tree.

Monsieur Bureau, a French traveler, disposes of the old stories about the "traveler's tree," in Madagascar, which has been represented as a great boon to thirsty wanderers on account of the water stored in its cup-shaped leaf-stalks. He says the tree grows only where there is a plentiful supply of water, and where rain falls frequently all the year round, and that since the leaves are situated at the top of the trees, which are very tall, the thirsty traveler would have difficulty in reaching them, even if it were necessary to do so in order to find water.

Nature Worked Backward.

An interesting story of a reversal of the ordinary course of nature, which cost a market gardener dear, is told by Miss Ormerod, the English naturalist. Watercress is eagerly devoured by caddis worms, but caddis worms are a favorite food of trout. The trout in turn have a voracious enemy in herons, which ordinarily catch the fish after they have grown fat on caddis worms. Recently it happened that a large grower of watercress had three-quarters of his crop ruined by the ravages of caddis worms. On investigation it was found that the trout, which ordinarily protected the plants from the worms, had been devoured, ahead of time, so to speak, by a flock of hungry herons, which in thus reversing the course of events, had brought disaster to the owner of the watercress.

A Steam Bird.

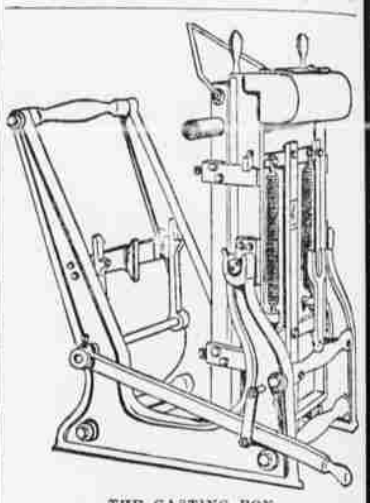
Prof. S. P. Langley, the secretary of the Smithsonian Institution, has constructed a flying-machine, driven by a steam engine carried by the machine, which made two sucessful flights at Occoquan, Va., on May 6. The machine is not large enough to carry a man, and is only intended as a model for experiment. It is called aerodrome, meaning "air-runner." Its framework is of steel, and the length of its wings, or aeroplanes, from tip to tip is fourteen feet. No gas is used to lift the machine, the ascensional force being derived from propellers driven by the portable steam engine; and this force is made effective through the shape and pitch of the wings. In the air the aerodrome resembles an enormous bird sailing in broad, regular curves and gradually rising. When the steam gives out the machine, instead of tumbling headlong to the earth, settles down gently and right side up. The engine used at present is capable of driving the aerodrome about half a mile. On account of Prof. Langley's high standing in the world of science great interest has been aroused in his experiments.

The Color of Water.

The fact is generally known that pure water appears blue when light is transmitted through a sufficient thickness of it, and that when opaque particles are suspended in it the hue of the water is greenish. But while pure water looks blue when light passes freely through it, yet when it is contained in a deep, opaque receptacle, like the basin of a lake or the ocean, it ought to absorb all light and look black. Experience shows, however, that the deepest parts of the Mediterranean, for instance, appear not black but intensely blue. This has been supposed to be caused by minute particles held in suspension, but the recent experiments of Prof. Spring at Liege suggest a different explanation. He has found that warmer currents passing through pure water interrupt its transparency, even when the difference of temperature is very slight. Such currents may cause deep water to appear blue by reflecting light back from its depths through the transparent layers above. This, it is suggested, explains the fact that fresh water lakes are more transparent in winter than in summer, because in winter currents of heated water are not traversing them. Even the shadow of a mountain falling on a lake may increase the transparency of the water by cooling the surface.

Stereotype Casting Apparatus.

Chas. M. Conley, for years an expert stereotyper and at present foreman of the stereotype foundry of the Chicago Newspaper Union, has perfected and patented an invention to automatically operate means for locking together the cover and matrix-bed of a stereotype-casting box preparatory to the casting operation, and in like manner automatically to unlock the parts when the cast plate is about to be removed. Provision is made at different portions of the box against springing and warping of the parts in use, thus not only avoiding the danger of leakage of the molten metal, but also insuring a perfect cast-plate product. The invention is one of great value, as it not only saves time, but protects workmen from injury and makes possible a better grade of work. The accompanying cut will clearly illustrate the improvement to the skilled mechanic.



THE CASTING BOX.

Childish Diplomacy.

We all know the child's aptness in "easing" the pressure of commands and prohibitions. If, for example, he is told to keep perfectly quiet because mother or father wants to sleep, he will prettily plead for the reservation of whispering ever so softly. If he is bidden not to ask for things at the table, he will resort to sly, indirect reminders of what he wants, as when a boy of five years and a half whispered audibly, "I hope somebody will offer me some more soup," or when a girl of three years and a half with still greater childish tact observed on seeing the elder folk eating cake, "I not asking." This last may be compared with a story told by Rousseau of a little girl of six years who, having eaten of all the dishes but one, artfully indicated the fact by pointing in turn to all the dishes, saying, "I have eaten that," but carefully passing by the untasted one.

When more difficult duties come to be enforced and the neophyte in the higher morality is bidden to be considerate for others, and even to sacrifice his own comfort for theirs, he is apt to manifest a good deal of skill in adjusting the counsel of perfection to young weakness. Here is an amusing example: A little boy, Edgar by name, aged five years and three quarters, was going out to take tea with some little girls. The mother, as is usual on such ocasions, primed him with special directions as to behavior, saying, "Remember to give way to them, like father does to me." To which Edgar, after thinking a brief instant, replied: "Oh, but not all at once. You have to persuade him."—Prof. Jas. Sulley.

Fireproof Paper.

L. Frobeen, of Berlin, Germany, shows the production of a valuable article for industrial and other purposes. Ninety-five parts of asbestos fibre of the best quality are washed in a solution of permanganate of calcium, and then treated with sulphuric acid, which bleaches the fibre. After treating the fibre thus, five parts of ground wood pulp are added and the entire mass put in the agitating box, with the addition of lime water and borax. After being thoroughly mixed the material is pumped into a regulating box and allowed to flow out of a gate on to an endless wire cloth, where it enters the usual paper-making machinery. It is reported that paper treated thus will resist even the direct influence of a flame, and may be placed in a white heat with impunity. Ordinary paper may be made fireproof by treating with a fluid composed of 33 parts manganate of chloride, 20 of orthophosphoric acid, 12 parts carbonate of magnesium, 10 of boric acid, and 25 of chloride of ammonia to a quart of water. Paper saturated thoroughly with this solution will resist great heat.

Watts—Been reading anything about these Cuban atrocities? Potts—No. I've got a box of them at home yet that my wife bought three months ago from an alleged smuggler.—Cincinnati Enquirer.

No wonder bees are profitable: they steal all they eat from the neighbors.