

The Millheim Journal.

VOL. LVI.

MILLHEIM, PA., THURSDAY, SEPTEMBER 14, 1882.

NO 37.

A. HARTER,
AUCTIONEER,
MILLHEIM, PA.

J. C. SPRINGER,
Fashionable Barber.
Next Door to JOURNAL Store,
MILLHEIM, PA.

BROCKERHOFF HOUSE,
ALLEGHENY STREET,
BELLEFONTE, - - - PA.
C. G. McMILLEN,
PROPRIETOR.
Good Sample Room on First Floor.

Free Buss to and from all Trains. Special rates to witnesses and jurors.

IRVIN HOUSE,
(Most Central Hotel in the City)
Corner MAIN and JAY Streets,
Look Haven, Pa.

S. WOODS CALWELL, Proprietor.
Good Sample Rooms for Commercial Travelers on first floor.

D. R. D. H. MINGLE,
Physician and Surgeon,
MAIN Street, MILLHEIM, PA.

D. R. JOHN F. HARTER,
PRACTICAL DENTIST,
Office in 2d story of Tomlinson's Grocery Store,
On MAIN Street, MILLHEIM, PA.

B. F. KISTER,
FASHIONABLE BOOT & SHOE MAKER
Shop next door to Foot's Store, Main St.,
Boots, shoes and cutters made to order, and satisfactory work guaranteed. Repairing done promptly and cheaply, and in a neat style.

S. R. PEALE, H. A. McKEE,
PEALE & McKEE,
ATTORNEYS AT LAW,
Office opposite Court House, Bellefonte, Pa.

C. T. Alexander, C. M. Bower,
ALEXANDER & BOWER,
ATTORNEYS AT LAW,
Office in Garman's new building.

JOHN B. LINN,
ATTORNEY AT LAW,
BELLEFONTE, PA.
Office on Allegheny Street.

CLEMENT DALE,
ATTORNEY AT LAW,
BELLEFONTE, PA.
Northwest corner of Diamond.

DAM HOY,
ATTORNEY AT LAW,
BELLEFONTE, PA.
Orphans Court business a Specialty.

W. M. C. HEINLE,
ATTORNEY AT LAW,
BELLEFONTE, PA.
Practices in all the courts of Centre County. Special attention to Collections. Consultations in German or English.

J. A. Beaver, J. W. Gephart,
BEAVER & GEPHART,
ATTORNEYS AT LAW,
Office on Allegheny Street, North of High.

YOCUM & HARSHBERGER,
ATTORNEYS AT LAW,
BELLEFONTE, PA.

D. S. KELLER,
ATTORNEY AT LAW,
BELLEFONTE, PA.
Consultations in English or German. Office in Lyon's Building, Allegheny Street.

D. H. HASTINGS, W. P. REEDER,
HASTINGS & REEDER,
ATTORNEYS AT LAW,
Office on Allegheny street, two doors east of the office occupied by the late firm of Young & Hastings.

THE OLD FARMHOUSE.

The easy chair, all patched with care,
Is placed by the cold hearth-stone;
With witching grace, in the old fire-place,
The evergreens are strewn,
And pictures hang on the whitened wall,
And the old clock ticks in the cottage hall.

More lovely still, on the window sill,
The dew-eyed flowers rest,
While 'midst the leaves on the moss-grown eaves,
The martin builds her nest,
And all day long the summer breeze
Is whispering love to the benighted trees.

Over the door, all covered o'er
With a sack of dark green balze,
Lays a musket old, whose worth is told
In the events of other days;
And the powder-flask, and the hunter's horn,
Have hung beside it for many a morn.

For years have fled with a noiseless tread,
Like fairy dreams away,
And in their flight, all shorn of its might,
A father—old and gray;
And the soft winds play with the snow-white hair,
And the old man sleeps in his easy chair.

Inside the door, on the sandal door,
Light, airy, footstep glide,
And a maiden fair, with flaxen hair,
Kneels by the old man's side—
An old clock ticks by the angry storm,
While the ivy clings to its trembling form.

THE TRUE RING.

WANTED, a clerk at 650 Washington street.

This was the advertisement that appeared in one of the morning papers of a large city. Many a young fellow who had been seeking employment for weeks felt his hopes rise as he read it.

Fred Baker heard it at the breakfast table the day after it appeared; his sister Louise said: "Oh Fred! I forgot to tell you that I saw in yesterday's paper that Mitchell & Tyler want a clerk; that will be the place above all others for you. It is a splendid store. Of course you can get the place if you are not too late. You can take a letter from Uncle Horace; his influence and your appearance will settle the matter. I heard Mr. Mitchell was real fussy about his clerks, but I'm sure he can find nothing to object to in my handsome, well-dressed brother," and the elder sister looked admiringly at Fred's fair face, smooth locks and well-fitting suit.

"Perhaps I'll call around there after a while," Fred said carelessly.

"Please hurry and go now, won't you?" his sister said; "I'm afraid somebody has snatched up the place before this time."

Fred finished his breakfast in a leisurely way, put a few extra touches to his already careful toilet, lighted a cigar and sauntered forth.

"Better throw away your cigar before you go in. Mr. Mitchell may object to that," said Louise, who stood in the front door as he passed out.

"He'll have to take me as I am," Fred said with a lofty air; "all gentlemen smoke. I do not propose to be a slave to him or any other man."

He called in at his uncle's office on the way and procured a letter of recommendation. Thus equipped, he felt confident of success.

Just behind him there walked with bright step a boy of fifteen, a year or two younger than himself. This was David Gregg. He, too, had seen the advertisement, and was on the way that very minute to 650 Washington street. He was the eldest of a family of children whose father had died at the beginning of this long winter. David had tried hard to find employment, had improved every moment in doing odd jobs for anybody, had studied the papers and answered advertisements until he was well-nigh discouraged. The places were sure to be filled by persons who had influential friends; and he had none, for his father had removed to the city from the country only a short time before his death, and now, more because he applied for everything he heard of than from any hope of success, he had risen very early that morning, made the fire, and while his mother was preparing breakfast put himself in the nearest possible order to go to Mitchell & Tyler's.

When he appeared at the breakfast table looking so bright and neat, his mother thought he was a son to be proud of, the handsomest boy in the whole city, yet his face was actually homely as far as beauty of features was concerned; his clothes were coarse, and he had no flashing pin, or gold cuff buttons like the elegant young gentleman who now walked before him.

What was the reason that among the large number of boys who filed in and out of Mitchell & Tyler's private office no one of them had been selected to fill the vacant clerkship? Mr. Mitchell, the senior partner of the firm, had asked some plain, straight forward questions of them. "Where do you spend your evenings?" "Do you play cards, go to the theatre?" etc., for Mr. Mitchell had declared to his partner, "If there is a boy in the world who has good habits and right principles, I'm going to hunt him up if it takes all winter," so it turned out that many of the boys could not give satisfactory answers to the searching questions, and others, when Mr. Mitchell sounded their knowledge of figures, were not ready-reckoners.

They came and went for one whole day, and as soon as the door was opened the next morning candidates came flocking in like birds.

And now it was Fred Barker's turn. He stood before Mr. Mitchell, his hat

on his head, his cigar removed from his mouth, it is true, but the smoke thereof curling up into the merchant's face. He presented his letter of introduction. Mr. Mitchell read it, then asked a few questions. Meanwhile his practical eye was taking it all in—the cigar, the imitation diamond, the large seal ring, the flashing necktie. He knew in a twinkling where Fred Barker probably spent his evenings, and that it would take more money to indulge his tastes than he could honestly earn.

To Fred's astonishment he presently heard, "I do not think, young man, that you are just the one we have in mind for this place." Then before he knew it he was bowed out.

The next boy who was admitted did not advance with such an over-confident air. He held his hat in his hand and spoke in a modest, respectful manner.

"Have you any recommendation?" "No, sir, I have none," David answered, a little dejectedly. "We have not been long in the city."

"Well, you need none, if I can trust my eyes," Mr. Mitchell remarked to himself. The bright, frank face and the manly air of the boy impressed him most favorably; he was still more pleasant when he drew him into conversation and learned what books he was fond of, and how he was going on with his studies evenings, although he had been obliged to leave the high school and earn his living.

Mr. Mitchell had very sharp eyes; he took note of the well-brushed garments, the shining boots, the snowy collar and cuffs, the delicately clean finger nails—even by such small things as these is character read—and above all, the look of sincerity and honesty shined from the blue eyes.

"Well, David," Mr. Mitchell said as he got up and walked backward and forth, "what if I were to tell you that you can have the situation providing you will work a part of the Sabbath?"

It was a most cruel test. The boy hesitated—just a moment—then he said while the color rose and his voice choked, "I should say, sir, that I cannot accept it."

"Not even when your mother needs money so badly?"

"No, sir, my mother would not use money so earned. She has always taught me to obey God and trust him, come what will."

"That has the true ring, pure gold," said Mr. Mitchell, bringing his hand down on David's shoulder. "My dear boy, I want you, and I do not want you to do any work for me on the Sabbath. I will pay you ten dollars more a month than the last clerk received, because I am glad to find one boy out of a hundred who remembers his mother's teachings, and fears to disobey his Lord."

Brilliant Marriages.

THE BIGGEST PART of the city of London is not the city at all, but the borough of Westminster, and the Duke of Westminster, the lord of the fashionable "West End," with the richest rent-roll of any man in England, was quietly married recently at Holkham, in Norfolk, the seat of the Earl of Leicester, to a young lady thirty or thirty-five years his junior. The bride is Miss Catherine Cavandish, youngest sister of the third Lord Chesham, who five years ago married the Duke's third daughter, and who is consequently both son-in-law and brother-in-law to his Grace of Westminster. An older sister of the bride is the wife of the Earl of Leicester, at whose country house the ceremony took place. The Duke's first wife was Lady Constance Leveson-Gower, daughter of the Duke of Sutherland, and she died only eighteen months ago, leaving eight children, whose names will possibly be more or less disbrilliant by his second marriage.

Another brilliant marriage, which attracted great attention in London a few weeks ago, especially among Catholic families, was that of Lady Emily Pelham-Clinton, sister of the young Duke of Newcastle, to Prince Alphonso Doria Pamphili, youngest son of the late Prince Philippe, whose magnificent palace and gallery on the Corso surpass all the other private houses and collections in Rome. The Doria villa, beyond the Janiculum Hill, is one of the most charming of the suburban resorts of the forestier in Rome's sunny winter weather, and it was within its stone walls, more than four miles in circuit, that Garibaldi made his heroic stand against the French mercenaries in 1849. Don John, the older brother, who has held the title for six years, is about forty and yet unmarried, and he went on from Rome to act as his brother's best man taking also his niece, Donna Maria Massimo, daughter of the Duke de Rignano, to be one of the bridesmaids. The marriage service was celebrated by Cardinal Manning at St. Mary's Church, and after the ceremony the relatives and special friends breakfasted with the bride's mother, who is still Duchess of Newcastle because her son, who succeeded to the title at fifteen, is still "over young to marry."

Put in a few sunflower seeds for producing an occasional feed for the poultry next fall and winter.

An Inferior Horse.

The writer met the jockey Rutherford while dining at the Winter Palace in St. Petersburg a short time after that huge sporting wrangle, and, in the course of a conversation on turf matters, the astute prodler of horse-flesh said, with a childlike and ingenuous smile:

"Would you like to know the dead inside facts as to that race was won?" "Why, you rode the best horse, didn't you?" we asked.

"Not a bit of it," replied the jockey, with a grin. "The fact was that Rutherford was only about the fourth choice, and was not rated at more than eighth or ninth in the pools. True Blue, Katy Pease and Thad Stevens all had the call over Rutherford. But it happened that my horse was a 'bolter,' and to steady him and prevent his flying the track I put blinders and goggles on him. You noticed them, I suppose?"

"There were two horses rigged that way," we replied.

"Exactly," Stevens was a nervous critter also, and as soon as his trainer saw how the goggles steadied my horse he put 'em on Thad too. The day before the race a big idea occurred to me. I got a couple of pairs of magnifying lenses and quietly put 'em in place of the plain glasses in the goggles of both horses. Catch on to the idea?"

"Well, partly."

"The only difference was that in Stevens' bridle I fastened the glasses with the bulge inside, so as to make them diminishing glasses, don't you see?"

"Like looking through the wrong end of an opera glass, eh?"

"Exactly. The result was that, while Rutherford was encouraged all the way by the course seeming only a couple of hundred yards long, the quarter flags appeared ten miles apart to Stevens. You see, a horse can be discouraged just as well as a man."

"Great scheme, that."

"Well, I should smile, Rutherford thought he was in for a little quarter race, and it kept up his heart, so that when he had nearly done the last mile and swung into the homestretch, and I called on him to let out his last link, he thought the Judges' stand was right under his nose, so he came home like an express train on a down grade; but Stevens, who thought he had about fifteen miles further to go, went all to pieces, as you remember, and almost lay down on the track, he was so mentally caved in, as it were."

A New Light.

A few days ago the patent office issued papers to Mr. William Calver of Washington, for a discovery which, if it possesses all the merits claimed for it, will be hailed with gratitude by both busy manufacturers and toiling housewives. The invention is no less than the production of intense heat by a peculiar arrangement of mirrors. Calver was born in England, but came to this country when very young. For a number of years he resided in New York. He has been a citizen of the district for upward of ten years, and has during that time been absent much in Arizona, looking after his mining property. He has been looking for a long time for some method of working mines and reducing the ore by a more cheap process than that in vogue. By a happy chance, equally as singular as that which befell Newton, he stumbled on his discovery.

The whole invention simply consists of an arrangement whereby the rays of the sun are reflected from any number of mirrors upon a common focus. Happening to direct the light from two ordinary looking glasses upon the same surface he noticed that the resultant heat was about doubled. He proceeded with his experiments, and succeeded in reducing wood to ashes and metal to a liquid state by simply concentrating upon them the reflected light of the sun from 20 small mirrors with flat surfaces. The principle is an unexplained one. It has never hitherto been suspected that lapping one ray of sunlight upon another increased the heat. The model patented by Mr. Calver consists of a number of small looking glasses, arranged in rows upon a frame so fixed that they can be converged upon any one point. A working model, of which he has a number, was exhibited to a reporter in the yard in the rear of his residence. Forty innocent, guileless looking 15 cent framed mirrors, each 3½ inches, were arranged upon a frame propped up like an artist's easel, and bearing a striking resemblance thereto.

Facing the easel was the fragment of what was once a barn door, also propped up and partly covered with a worn and faded sheet of zinc that bore unmistakable evidences of having been burned through in several places. It was but the work of a minute to converge the 40 mirrors upon a space 3½ inches by 3½ inches upon the barn door, and then the revelations began. As each mirror cast its quota of sunlight upon the common store, the parallelogram of light grew whiter and more dazzling, until at last it looked like a patch of electric light. But little patience was required to await results. In less than 30 seconds a thin, curling puff of smoke gave evidence of the progress of the experiment. In a minute the board was bursting out in flames. The focus was then shifted

upon the zinc. In a few moments it began to turn color, then shrink as if anxious to get away where it was cooler, and then, in less than three minutes, the entire surface covered by the focus was literally melting, drop by drop. To melt zinc requires a temperature of over 700 degrees Fahr. The most wonderful feature about the whole thing is the brilliancy of the light. Each mirror adds not only heat but light. The 40 mirrors produced a light more brilliant than an ordinary electric light. A hand, held so as to intercept the focus, becomes as white as driven snow. A white handkerchief defies ordinary sight, and conveys but an impression of beautiful, impossible whiteness. It is as hard to look at as the sun itself. The immense practical value of the invention can be readily understood. Mr. Calver's forty mirrors boil water in less than no time. An egg placed in the water is done hard quicker than by fire. Meat and vegetables are cooked in 10 or 15 minutes. A half hour's sunshine any time between 9 a. m. and 4 p. m. in the summer will do the cooking for an ordinary sized family for a week if necessary. By the mirrors engines can be run, wells dug, mines worked, ore melted and refined, every kind of cooking performed, and, in short, there is no variety of industry in which they cannot successfully compete with mule power, steam or electricity. There are many curious things in connection with Mr. Calver's discovery. More heat can be gotten from the mirrors in winter than in summer, strange as it may appear, for the earth is then over 3,000 miles nearer the sun. Three thousand degrees Fahr. decomposes water, and this heat can be readily produced with the large mirrors, 1000 of which, one foot square, will run the largest engine in the world. In the West the process of concentrating the sun's rays will be of immense benefit. Statistics show that there are over 1,000,000 square miles of territory in the United States where there is, on an average, but one cloudy day in a month for eight months in the year. All the rest are clear. The heat produced by the thousand foot-square mirrors will do more work in 15 minutes than can be ordinarily done in a day, and a day's steady work will outstrip a week's progress by other methods.

The heat mirrors will make ice as easily as they will melt steel. A few large sized ones will operate a machine large enough to usher into existence 100 tons of ice a day. It is the intention of the inventor to vigorously protect his patent and to shortly begin the manufacture of his mirror furnaces. Probably he will make a lot of the smaller kind, convenient for tourists, which can be packed away in a trunk and yet large enough to do all the cooking for the party in a few minutes.

The heat from the mirror can be thrown a long distance. Mr. Calver says he can make a heat powerful enough to melt the gorges of liberty on the capola of the capital by putting his mirrors several squares away.

The West Indian Sugar Crop.

The Jamaica Sugar crop is reported the largest that has been realized for many years, over three thousands tons having been sold in one parish of the island for shipment to Canada. Despite the long prevailing droughts, which have been general in the West Indies, and nearly two hundred fires in the cane fields of Cuba, the crop of sugar produced this season in the latter island has been finally fixed by careful compilation at six hundred and one thousand five hundred tons, being an excess of twenty-three and three-quarters per cent over the last crop. This will be welcome news to the world generally, but, as our own sugar belt lies under climatic influences approximating those which have for some months been so favorable to West Indian cane fields, Louisiana planters may take a special interest in it. The cane plant during the early stages of its growth requires but little moisture, and in Barbados, where sugar culture has been most carefully studied by Governor Rawson, any marked excess of rain during the first six months of the year is injurious to the crop which is being reaped and to that which is to follow. The same is in a measure true of the Louisiana cane crop, which therefore, shows great fluctuations in different years (as in 1877 and 1878, when the yield of the two seasons varied about seventy per cent). It is noticeable that the two largest Louisiana crops—those of 1853 and 1861—were made in seasons which were extraordinarily favorable to West Indian sugar planters, though a fine sugar season in the Antilles does not insure a similar one in Louisiana. The yield of the present crop on our Gulf coast will of course depend largely on the weather of the next three months, as it begins to ripen in August or September and is usually not fit for the mill until October. It is sometimes reduced by severe November frosts. But as yet nothing calculated to mar the prospect of good returns has been reported.

If we keep well and cheerful and the mind constantly active we never grow old. By and by we get to the end of the journey but we never grow old.

He spoiled the Box Trick.

There are several ledgermain performers at the various auction shops. The Magic Box trick is a favorite method of entertaining customers and collecting a crowd. A few nights since the auctioneer announced with a worthy flourish of his jaw that he would render the great trick. He got out a number of boxes, filled them with handkerchiefs, and hats and case knives, and allowed the audience to lock them up. Then taking an empty box he handed it to a tall man, evidently from a southern mining camp, and told him to hold it high over his head.

"Now, gentlemen, I will cause a transformation to take place which demonstrates that the hand is quicker than the eye. I will cause the contents of the locked box to appear in the box now held in the air, and to do it before your eyes."

Just as the crowd began to edge up close to detect the modus operandi of the performer, a small boy at the end of the counter called out in a squeaky voice "You forgot the socks!" Immediately the performer hauled down some socks and began to retail them to the crowd at three for two bits, after which he pulled some undershirts from the shelves and offered them at bed-rock figures, while the knowing ones laughed at the poor dope, who held the box in the air for about fifteen minutes. Presently the nature of the hoax dawned upon him, and hurling the box at the head of the auctioneer, he left the place amid a howl from the crowd. "His trick is to see who is the d—dest fool in the crowd," said the auctioneer, and the merriment was unbounded.

Last evening the hand-me-down performer attempted to repeat the trick, but with less happy results. After the preliminary oratory he handed the box to a green looking man near him. As he leaned over the mineralogical person grabbed him by the collar and yanked him clean over the counter. Getting him over on the floor he steered him all over the place, and played with his head, using it to beat the floor with as if he supposed it was a drum-stick. "How do you like the box trick?" he shouted as he stood him on his head for the fifth time. The crowd howled with glee, for in the person of the animated old man they recognized the party who had been fooled a few nights before. After pitching his prey in behind some old shirt boxes he strolled out remarking:

"When anybody wants assistance in a box trick, send for Jim Slack, Pueblo, I'm a boxer, myself."

The Red Snapper.

Probably the best fish added to the list of those that are edible within the past ten years is the red snapper. Ten years ago this fish was almost unknown here, though occasionally one was sent to market as a curiosity, and attracted attention because of its brilliant color. It was formerly eaten to some extent by the people of Cuba and the coast of the Gulf of Mexico, but was never used as a food in this latitude until about eight years ago, and it is only within three or four years that it has become such a favorite with the general public, and one of the most popular for table use.

In 1878 the first scientific description of the fish was made by Professor G. Brown Gould, of the United States Fish Commission. The fish is hard and firm, resembling closely the sheephead in flavor, and its best qualities are developed by baking. It is caught both on the east and west coasts of Florida, and at different points in the Gulf of Mexico. It is caught entirely by hand, with drop-lines, and affords much sport to the fisherman, as it is gamy, and when caught will make a lively fight to escape. These fish run together in large schools, and average about twelve pounds in weight. The largest one ever exhibited in New York weighed thirty-two pounds. The red snapper is not in market now, the season extending from the first of September to the first of May. Every year the quantity sold shows a steady increase. The average price last season was fifteen cents a pound.

Woolen Mill Machinery Wears Out.

Much new woolen machinery is required each year to replenish that which has actually been worn out. Excellent authorities establish the average life of the entire mechanical equipment of a woolen mill being twenty years, and as there are about 9,000 sets of machinery in use in the United States at the present time, it follows that an average of 450 sets become worn out and has to be replaced each year. Four hundred and fifty sets of machinery means 1,300 to 1,500 cards, about as many self-operating spinning mules, 10,000 to 15,000 looms, and other machinery in proportion. A 200 spindle mule costs \$750, and one with 300 spindles costs \$900. To replace the mules alone, therefore, which are annually worn out in the United States necessitates a disbursement of over \$1,200,000 per annum among the machinery manufacturers, and to replace the cards and looms required for the same purpose costs a much larger sum.

True civility is a form of good-will toward men. Everything is gained and nothing lost by civility.

Time-Balls.

In his abstract of replies to various questions touching the working of time-balls, General Hazen says: "Three methods of constructing the ball are mentioned. The first is by making a light framework, either of wooden hoops or of iron or steel wire, and covering the skeleton with strong black canvas. The ball must be weighted, in order to drop instantly, the amount to be added being determined, if desired, by experiment. It is estimated that a ball should weigh from twenty to fifty or more pounds in order to move quickly, the weight varying with the diameter of the ball and its exposure to high winds. The second method of construction is that of the New York ball, which is composed of twelve thin vanes of sheet copper, disposed radially, half of them semi-circles, the rest crescents, by this device the visual effect of a solid ball is secured. The weight of the ball is 125 pounds. The third method of construction is illustrated by the Boston ball, which is made of rolled plate copper, one-eighth of an inch in thickness. It is four feet in diameter and weighs nearly 400 pounds.

"The essential part of the apparatus is that which provides for the releasing of the ball at the right instant. There are four different plans described in detail. In all of these the ball is raised to the top of its staff by a windlass, or directly by hand, and held securely till within a few seconds of the time of release, when the releasing apparatus is applied, and the ball falls at the automatic giving of the signal by the clock. The devices described differ from each other only in the way the armature of the electro-magnet operated by the clock is connected with the hoisting apparatus, or the rope which detains the ball at the top of the staff till its release.

At New York the circuit through the clock and electro-magnet is closed at the instant the ball is released, while at Boston the ball is detained at the top of the staff by the electro-magnet, and the releasing of the armature, when the circuit is broken, causes the ball to fall. The length of the line is an important factor in determining the choice between an open or a closed circuit. The New York ball is dropped directly from Washington over a line 240 miles in length, the St. Louis ball directly from Glasgow, Mo. at a distance of 180 miles, the Boston ball from Cambridge, Mass., at a distance of four miles. The circuit in all these cases is necessarily open to prevent interruption, the operating clock closing the circuit, but at Boston, by the use of a relay, a local circuit is used for the immediate dropping of the ball, which is a closed circuit.

"The percentage of failures in dropping the ball is variously estimated from one to five. From the practical working of the St. Louis ball, it is found that the number of failures in three months was two and a half per cent. The Boston ball fell seven months in succession with no failure, and records three failures in the last year. The leading cause of failure has been a break in the telegraph line. The New York ball has never been prevented from dropping by a high wind, but could not be hoisted three times during the last winter on account of snow. The Boston ball was not hoisted once each winter since its erection, on account of ice. At such times the failure to drop the ball is of not much importance, as usually on account of stormy weather the ball could not be seen from any great distance. The answers to the question upon the degree of accuracy possible in the dropping of a ball are in general devoted to a discussion of the accuracy attainable by the daily signals from a well-equipped observatory. This is estimated from less than 0.1 in good weather to 1 or more in cloudy weather. The accuracy of dropping a ball, however, depends not only upon the accuracy of the clock signals, but also on the condition of the telegraph lines and the adjustment of the working relays. Professor Fritchett estimates that under ordinary circumstances, over a circuit of one or two hundred miles, a ball will be dropped within half a second of the truth.

"The distance from an observatory at which it is possible to drop time-balls or clock signals depends wholly upon the possibility of securing constant telegraphic connection. Professor Langley would undertake to control clocks in any part of the United States if an uninterrupted electric current is provided. Mr. Hanley would undertake to drop a time-ball at any point within 300 miles from the building of the Western Union Telegraph Company, New York City, provided a satisfactory compensation is given the company for the use of its wires. The sending of signals from an observatory by which a clock can be regulated is possible to a great distance from the observatory through telegraph connections."

No doubt this is all very ingenious, but the most practical part of the suggestions seems to be having a few time-balls in Professor Langley's electric current. No matter where time-balls were erected in great cities they would be seldom seen by anybody, as is now the case, and unless they could in some way be made to serve as media of communication between the astronomical clock and electric batteries scattered in all the homes and offices of the people there seems to be no special object to be gained by increasing the numbers of them. Nor is there any sufficient reason for supposing that the average man is specially troubled as to the exact moment of time in any given hour, noon or another. Again, there is no earthly probability if all the world's time-pieces were right that men themselves would be any more likely to "come to time," and the first and last study of man is not "time-balls," but mankind.

A Sly Trap.

Mr. White, of Newcastle, N. H., has a brood of chickens which have the run of a portion of the yard, the old hen being kept shut up. The chickens are fed with moistened meal in saucers, and when the dog gets a little sour it attracts large numbers of flies. An observant toad has evidently noticed this, and every day along toward evening he makes his appearance in the yard, hops to a saucer, climbs in and rolls over and over until he is covered with meal, having done which he awaits developments. The flies, enticed by the smell, soon swarm around the scheming batrachian, and whenever one passes within two inches or so of his nose his tongue darts out and the fly disappears, and this plan works so well that the toad has taken it up as a regular business. The chickens do not manifest the least alarm at their clumsy and big-mouthed playmate, but seem to consider it quite a lark.