A MEMORABLE VOYAGE.

A True Story of Gambetta's Trip in the Balloon from Beleaguered Paris.

The following, says *Figaro*, is an absolutely true account of that famous voyage in a balloon by which M. Gambetta escaped from beleaguered Paris. The details have hitherto been but imperfectly known to the public. We are fortunately enabled to give them as they came, lately, from M. Gambetta's own lips—not, indeed, in our hearing, but in that of several persons who merit our entire confidence.

M. Gambetta was dining the other day with a lady holding a high position in Parisian society. After dinner the illustrious dictator, in compliance with a very general request, turned round in his chair, and related some passages of his curious and eventful life.

Of course he soon had to say something about the siege of Paris. He talked of his dream of a prolonged resistance, and went on to show how he came to make up his mind to leave the city by balloon. At length all was ready for his flight through the air; he bought furs, took with him the inseparable Spuller, jumped into the car and confided Cæsar and his fortunes to the care of the aeronaut. The latter, as we shall presently see, was so sensible of the honor that on the strength of it he treated himself to a remarkably good dinner as a preparation for the journey.

And now we had better let the hero of the adventure relate it in his own words, which, as we may again assure our readers, have been exactly reproduced in the following account:

"When we started," he said, in his purest Gascon accent, "I had a terrible attack of bronchitis. Everybody was saying: 'If you go you are a dead man.' The *savants* especially assured me that the temperature would be ice cold. Luckily, I had my furs—those furs that people have said so much about since then—and off we went. Once fairly clear of the earth I found it so hot that I was glad to throw off all my wrappers. So much for the *savants*. That's why I never cared to learn anything. Science—pooh! In five or six hours the balloon stopped. I shook the aeronaut, who had fallen asleep. 'Where are we?' 'Over the Oise,' he replied, 'just on the boundary of the department of the Somme and Oise.' 'Are you sure?' 'Oh, monsieur, I know the country as well as I know my own pocket.' And in fact, after looking at my map, and then at the landscape, I found we were above the Oise, or, at least, above a river. It was the Oise or something else—let it be the Oise. The point was to know whether we were still over the Prussian lines or among our own people. Well, just then, directly under the car, I saw a building, a sort of farm, with a large square courtyard in which a number of men were lying down with their piled arms in their midst. 'Who are they?' 'Oh! monsieur,' says he, 'for certain they are Gardes Mobiles; we are in the French lines.' 'The devil we are,' said I; 'but are you sure of it?—because, for my part, you know I cannot recognize the uniforms.' 'Perfectly sure.' 'Down we go then,' and down we went, till we were not more than seven or eight hundred metres from the earth, when we heard a German challenge, 'Wer da?' and saw a mighty bustle in the courtyard—the men jumped up, seizing their arms and beginning to shoot at the balloon. And the aeronaut had slipped the grappler! He was drunk. I had just time to whip out my knife, cut the cord and pitch him to the bottom of the car—with a threat that, if he stirred, I'd throw him over. Then we began to mount again, but slowly enough, as it seemed to me, for we could hear the music of the bullets, though at that distance they could not have done us much harm. I verily believe that if we had leaned over we might have caught them in our hands. In fact, I know we could, for I afterward made the experiment at Tours, by setting some chasseurs to fire on a captive balloon fixed at about the same height. The balls had no appreciable effect. After awhile the balloon stopped, then began to decend once more, with the Prussians still watching its motions.

"We were again near the river, so we had no better alternative than to drop into the water or into the arms of the enemy. I scribbled a dispatch to let my colleagues know how we stood, and sent it off by a pigeon, but the bird came back to the car—no doubt having lost its way. We were still dropping down, so at last there seemed to be but one hope—the Oise. As to our getting over the river to the French side before we fell, it was not to be thought of; there was not an inch of air. All this while Spuller had been smoking his cigar like a philosopher. At last he said, with a smile: 'The Oise, the Oise; that's all very well for you; you know how to swim, but I may as well tell you I don't.' 'Stuff!' I said; 'I'll look after you.' Still we shot down, when on a sudden—puff; there was a breath of air, but such a slight one that I made a joke of it, and told Spuller it was only the smoke of his cigar. The gods had come to our aid. The balloon passed the river, and made straight for the top of an oak. You've no idea how uncomfortable it is to come down on the top of an oak—little branches without end, and all that. However, we landed, and were—saved."

The Lady of the House—"Very good; but you must have had just a little scare."

Gambetta—"Oh, madame, not the least in the world."

Survival of the Fittest.

The Chicago *Evening Journal* says: * * * This man was a scholar and an antiquarian—a student of nature and books; he had been a man of wealth and position, but had lost the one and renounced the other—had indeed become a misanthrope, and retired with what means he had left, determined not to live when his property was exhausted. The late Rev. Dr. Reynolds was a warm personal friend of the recluse, and enjoyed relating his first meeting with him. The doctor was slowly passing his grounds, when he observed a workman felling some dead trees. He stopped to remark to the supposed laborer, that the foliage which remained was much improved by the loss of the others. "Yes," replied the man in the blouse, still swinging his ax, "it is a case of the survival of the fittest."

"Why," said the doctor, in surprise, "has that phrase come down to you?"

"Yes," was the bitter reply, "but in my case it is a misapplication."

The doctor saw his mistake and recognised in the man before him one to whom even his learning and judgment could defer.

Shortly after this man died; wilfully abstaining from food and medicine, resolutely determining to know the secrets of the beyond. At his funeral the Rev. Robert Collyer delivered this sentiment: "There are men who die before they are dead. They lose all interest in the world and the world loses all interest in them—our friend was one of them."

The New Dominion.

A Victoria dispatch says that at a meeting held in that city the following resolution was passed unanimously: That in deference to the hope and belief expresed by Lord Carnarvon that actual railway construction will be commenced by the Dominion government in British Columbia after the lapse of a single summer, it is hereby resolved that a petition be presented to the Provincial Legislature praying that it may be pleased to take such action this session as will make clear to the Dominion government that unless the actual construction of the Canadian Pacific railway be commenced on or before the first of August, 1878, according to the Carnarvon settlement, this province will ask permission from the British government to dissolve the connection with the Dominion of Canada. The meeting was the largest and most enthusiastic ever held in Victoria.

On the last division the government had a majority of five in the house.

HIS PLEASURES.—"My son," said a doting mother to her eight-year-old, "what pleasure do you feel like giving up during the Lenten season?" "Well, ma, I guess I'll stay away from school," was the reply.

PROFESSOR BELL'S TELEPHONE.

The Human Voice Carried a Hundred and Forty Miles.

Professor A. Graham Bell, the inventor of the telephone, comes from the staid old city of Salem. About five years ago he first began to think about the possibility of the transmission of sound by telegraph, and the idea took possession of him completely. His invention had so far taken form eighteen months ago, that with the assistance of a practical electrician, Mr. Thomas A. Watson, he began to experiment, using for the purpose a wire between Boston and Cambridge, about two miles long.

The first time the practical success of the telephone was demonstrated to the satisfaction of others was on Oct. 9, 1876. The telephone then spoke for itself, and the conversation of the operator in Cambridge could be distinctly heard at the Boston end of the line. An interesting dialogue took place, the speakers talking in their ordinary key.

One of the experiments, which occurred on Jan. 21, was eminently gratifying in its results. Not only every word spoken in Boston, but even the tones and inflexions of the several voices were accurately transmitted and readily recognized by those at the Salem end of the line. Other experiments demonstrated the fact that a lady in Malden could sing "The Last Rose of Summer," and every note could be heard in the room at 5 Exeter place, Boston. The sound was perfectly clear, and had about the same effect as if the listener were at the rear of a concert hall, say one hundred feet away from the singer. Subsequent trials showed that laughter, applause or instrumental music could be equally well transmitted. In the case of the latter, not only the key could be transmitted but also the quality of the music. A violin could be distinguished from a violoncello.

The greatest distance that has been vanquished by the telephone is 143 miles—from Boston to North Conway, N. H. The most recent improvements made on the instrument do away with batteries altogether, and premanent magnets are now employed instead, the electric wave used in transmitting the sounds being generated by the voice itself. This is regarded as a very important step in advance, as the bother and expense of keeping batteries in order has been the great drawback to the employment of the instrument for private purposes. The honor of having received the first newspaper dispatch ever sent by means of the telephone belongs to the Boston *Globe*. A report of a lecture by Prof. Bell in Salem was transmitted verbally to it last Monday night. This lecture was about the telephone, and in the course of the evening a series of remarkable experiments was made in the presence of the audience. Songs and brief speeches were sent from Boston, and the applause which greeted their reception in Salem was distinctly heard in Boston. Imagine sitting in a hall and hearing a man, eighteen miles away, sing "Hold the Fort."

"I haven't the slightest doubt," Mr. Watson said, "that in a few months things will be so that a man can make a lecture here in Boston and be heard by an audience in any part of the country."

"Do you expect that the telephone will entirely supersede the present system of telegraphing?" I asked.

"Yes, we expect it will, eventually. A company is now forming for the purpose of manufacturing and introducing the instrument. In time it can't fail to place the old dot and line alphabet system entirely. We expect, at first, it will be used mostly on private lines and for city business. It will probably take the place of the present district telegraph companies and the like, as it will be especially convenient for that class of business."

"Won't the receiving operators have to learn shorthand?"

"Yes, I suppose they will. In our experiments we have generally paused after saying a sentence, so that the receiver had time to write out in long hand."

Mr. Watson remarked that the introduction of the telephone would probably have the effect of increasing the telegraph business to such an extent that it would hasten the time when the wires would have to be laid underground instead of being strung on poles. *Apropos* to singing by telegraph, I asked if it would not save a good deal of expense to our American opera managers. "An American audience could hear Nilsson, Patti, or any European *prima donna*, without bringing them across the Atlantic," I suggested. "Just place the receiving machine in the Boston Music Hall, for instance, and let the songstress put her mouth close to the mouthpiece in Paris, London, Vienna or St. Petersburg, and the effect would be the same as if the *prima donna* herself were present in the flesh."

"Certainly," said Mr. Watson, smiling, "and it would be curious to observe what effect the presence of the voice and absence of the person would have on the critics. Homely singers would probably advance in public esteem, while some of the beautiful cantatrices might suffer a corresponding set-back when their voices were judged on their merits."

No trial has yet been made, however, of the transmission of sounds to so great a distance as across the Atlantic. Mr. Watson said that as far as they had been able to ascertain, there seemed to be a limit to the distance over which the sounds could be made to travel; but he expressed himself as confident that in due time any given distance could be annihilated. "We have, in fact," he added, "talked through a wire arranged to give an artificial resistance equal to 40,000 ohms, which is more resistance than the entire length of the Atlantic cable would offer. But there are other obstacles to be overcome in order to transmit the sound of the voice correctly to such a distance as that. Prof. Bell and I are constantly at work here perfecting the system, you see. When a favorable opportunity offers, we shall try and have a practical test over one of the transatlantic cables."

The wonderful little instrument of whose future value to civilization the inventor is so sanguine, consists of a powerful compound permanent magnet, to the poles of which are attached ordinary telegraph coils of insulated wire. In front of the poles, surrounded by these coils of wire, is a diaphragm of iron. A mouthpiece, whose function is to converge the sound on this diaphragm, substantially completes the arrangement. The operation of the instrument is thus described by Prof. Bell: The motion of steel or iron in front of the poles of the magnet creates a current of electricity in coils surrounding the poles of the magnet, and the duration of this current of electricity coincides with the duration of the motion of the steel or iron moved or vibrated in the proximity of the magnet. When the human voice causes the diaphragm to vibrate, electrical undulations are induced in the coils around the magnets precisely similar to the undulations of the air produced by the voice. The coils are connected with the line wire, and the undulations induced in them travel through the wire, and passing through the coils of another instrument of similar construction at the other end of the line are again resolved into air undulations by the diaphragm of this instrument. The voltaic battery is entirely dispensed with. The line wire may be of any given length, provided the insulation is good. Prof. Bell further says that soft tones can be heard across the wires even more distinctly than loud utterances, even a whisper being audible.

How to Succeed.

If your seat is hard to sit upon, stand up. If a rock rises up before you, roll it away or climb over it. If you want money, earn it. It takes longer to skin an elephant than a mouse, but the skin is worth something. If you want confidence, prove yourself worthy of it. Do not be content with doing what another has done—surpass it. Deserve success, and it will come. The boy was not born a man. The sun does not rise like a rocket, or go down like a bullet fired from a gun; slowly and surely it makes its round, and never tires. It is as easy to be a leader as a wheel horse. If the job be long, the pay will be greater; if the task be hard, the more competent you must be to do it.

SUMMARY OF NEWS.

Items of Interest from Home and Abroad.

A fire was started in the Bateman House, Kansas City, Pa., by some one throwing a cigar stump among waste papers. The means of escape from the upper stories were early cut off, and Mrs. Bateman and her four daughters were burned to death, as was a guest named N. Brown. Mr. Bateman rushed into the flames and rescued a son, but both were cruelly burned—the son subsequently dying. A number of boarders were injured by jumping from the windows...... Frederick and Charles Greene, aged seventeen and thirteen years, respectively, sons of J. C. Greene, of Hopkinton, R. I., were drowned while sailing...... A red haired young man deliberately walked into the rapids at Niagara, and was swept over the fall. Nothing is known as to his identity...... The five-story iron building in St. Louis, occupied by Simon & Gregory, as a wholesale drygoods store, and by Claflin, Allen & Co., wholesalers of boots and shoes, was completely destroyed by fire, with a total loss of nearly $500,000. One man perished in the flames...... A low, rakish-looking schooner of sixty tons, manned by pirates, is reported cruising in the West Indian seas. ......The Japanese government has recently gained several victories over the insurgents.

The Count de Chambord denies the stories regarding his relinquishment of claims to the throne of France, and says he is only waiting the proper moment for direct personal action...... The seven-story buildings in Bond street, New York, occupied by the Gorham manufacturing company, Robbins & Appleton, of the American watch company, and a host of smaller jewelers and silversmiths, were completely destroyed by fire, notwithstanding the desperate efforts of the entire fire department. The flames originated in the basement, in some unknown manner, and although contested foot by foot by the firemen, succeeded in creeping from story to story until both of the immense so-called fireproof edifices were wrapped in flames and the heavy safes of treasures on each floor fell crushing through into the sub-basement, carrying down all the heavy beams, and permitting the walls and iron front to bulge outward and finally crumble to the earth. The total losses amounted to nearly $1,000,000, which were partially covered by insurance. ......A conflagration at Fostoria, Ohio, destroyed Leonard's opera house and Robbins' block. The losses were heavy; partially insured...... J. D. Edgerby's drug store and grist mills at Lee, N. H., were destroyed by fire. Loss, $12,000; insurance, $10,000.... Alexander Blacklock, president of the San Francisco Canning and Oyster company, defaulted with funds and stock of the company amounting to $9,000, but was arrested in New York while attempting to sail for Europe. Before his dishonesty became known he had succeeded in inducing a young bookkeeper in San Francisco to forge his employer's name to the amount of $11,640, with which to speculate. The young man was detected..... Joe Coburn, the pugilist, was sentenced to ten years' imprisonment at hard labor, for attempting to kill a New York policeman by shooting...... John Q. Hoyt, a well known New York speculator, has failed with liabilities amounting to $1,730,826.25, and assets footing up only $225,000......Dr. Gurdon Buck, one of the best known surgeons of the country, died in New York at the age of seventy.

President Hayes expresses his belief that an extra session of Congress will be called about June.... Alfred Rex shot and killed his brother at Barnston, Canada. The fratricide was arrested...... Matilda Heron, the once famous actress, died in New York, aged forty-six years. She leaves a daughter, Bijou, who is rapidly becoming a popular favorite...... Joseph L. Lewis, for many years a merchant in New York city, died recently, and not having any near relatives, he left his entire fortune of $1,000,000 to the United States to cancel that amount of the debt...... The losses by the great fire among the jewelers in Bond street, New York, will foot up nearly $2,000,000. There will be considerable salvage on account of the masses of gold and silver to be found in the ruins...... J. T. Beads, secretary of the California Stock Exchange, has disappeared with $17,000 in stocks and the books and papers of the institution...... The noted Sioux chief, Sitting Bull, is reported at Wood Mountain, in British America, having in his possession one thousand horses and mules captured from the United States forces...... The Lake Shore railway company is settling with the Ashtabula victims, where possible. B. H. Clark, of Westfield, Mass., has just received $1,500 in settlement of his claims, and the sum of $5,100 was paid to the widow of one of the killed...... Five business houses in Donovan, Ill., were destroyed by fire...... Andrew McKinney, who was connected with John Q. Hoyt, in railway matters in New York city, is a bankrupt. Liabilities over a million dollars and assets of only a trifle over three hundred thousand dollars.

While the priests of St. Francis Xavier's church, New York, were conducting a "woman's service" to an audience of nearly three thousand, mostly females, a woman fainted in the gallery, which attracted much attention, and gave credence to a sharp cry of fire, which rang out almost simultaneously. Instantly the vast congregation was a seething mass of humanity, crushing and crowding each other in mad effort to reach the door. Notwithstanding the efforts of the holy fathers to calm the excitement, the rush continued until the church was cleared, when it was ascertained that six women and one boy had been trampled to death, and hundreds had received more or less serious injuries in the jam. Four of the victims were found outside the church at the foot of the stairs and the other three in the vestibule. There was not the slightest foundation for the panic beyond the wild alarm uttered by some child in his fear. After the rush from the church the sextons found as many as fifty women in the body of the church, they having fainted at the beginning of the panic...... Another advance in freight rates west from New York city has been adopted by the different railway lines...... A five-story brick building in New York, occupied as a wholesale grocery and filled with goods, fell into the street without any previous indication of weakness. Fortunately, it occurred at night, or a terrible loss of life would have occurred, as the street is crowded all day. The loss is put at $50,000...... An explosion occurred in the Worcester colliery, near Swansea, England, and a large number of miners lost their lives. Sixteen bodies were recovered, and it was thought many more remained in the pit..... Wm. F. Speakman, a mill operative of Oakdale, Mass., while demented from a protracted spree, killed his sister and cut her body in a terrible manner with an ax...... A fire in the Posey block, Evansville, Ind., consumed property to the value of $71,000.

Thirty of New York's most prominent lottery and policy agents were arrested on complaint of Anthony Comstock. Among them were the representatives of the Havana and Wyoming lotteries ...Hon. Oliver Ames, the surviving brother of the late Oakes Ames, and the head of the immense works bearing the family name, died in Easton, Mass., aged seventy-one years. ......A terrific wind storm prevailed over the greater portion of the country and an incalculable amount of damage was done in the way of demolishing and unroofing buildings, tearing off signs, fences, etc. Several churches lost steeples and many vessels were driven into collision and more or less damaged. Numerous persons were injured in New York city by falling signs and trees. The wind was moving at a velocity of from sixty to seventy-five miles per hour...... It is generally believed that the disastrous fire in New York, by which the jewelers suffered so severely, was originated by contact of steam heating pipes with woodwork..... The coroner's jury in the case of the Ashtabula victims, who have been awaiting the reports of experts in regard to the safety of the bridge, has just returned its verdict, in which it finds that the bridge was defective in design and construction, and censures the railroad company for not having inspected the structure during the eleven years it was in use; they therefore declare the company answerable for the disaster. They also find that the company violated the State law regulating the heating of cars, and are therefore responsible for the fire which consumed so many bodies. The fault of not subduing the flames is chargeable to those who first arrived at the scene—there having been abundant means of extinguishment. To conclude, they hold the railroad company responsible for the loss of life ...... Nine of the principal business houses in St. Johns, N. B., were destroyed by fire. An explosion of chemicals in one of the buildings caused the walls to topple over on the adjoining edifice, killing five prominent men and injuring a number of others.

Peter H. Penwell, of Erie Center, N. Y., killed his wife with an ax, on account of domestic troubles which had existed for years. After the murder he made an unsuccessful attempt at suicide by cutting his throat. Previous to the murder both of them took arsenic with deadly intentions, but it proved an overdose in each case and did not operate fatally ...... An Egyptian man-of-war, engaged in breaking up the slave trade, took fire at sea and was completely destroyed. Of the 420 men on board, all but twenty escaped...... The assistant secretary of the treasury has issued the forty-second call for $10,000,000 of five-twenty bonds of May and November, 1865. The call is for $7,000,000 coupon and $3,000,000 registered bonds...... J. M. Taylor's saleratus factory in Brooklyn, N. Y., was completely destroyed by fire, with the large stock on hand. The loss amounted to $140,000, on which there was a fair insurance ...... Foreign dispatches continually report ill-feeling as existing and growing between the French and German governments. ......The contestants of the Vanderbilt will claim that the testator was of unsound mind at the time of making the instrument and was also unduly influenced by the son, who received the larger part of the estate ..... A two-year-old child pulled a lighted kerosene lamp from a bureau in a five-story New York tenement, and in a few minutes the entire floor was in flames and the means of egress of all the residents of the upper floors was cut off. Brave men forced an entrance by means of ladders and succeeded in rescuing the unfortunates with the exception of two children who were suffocated to death. The lives of two of the other children were despaired of, as they inhaled so much carbonic acid gas.

President Hayes and his cabinet agree to carry out the civil service programme as laid down in the President's inaugural address...... Hon. Simon Cameron, of Pennsylvania, has resigned his office of senator, declaring he is tired of the care and worry of the position...... Secretary of State Evarts has asked Fred'k W. Seward, son of the late secretary, to accept the position of assistant secretary of the department...... In addition to the rinderpest sweeping off the cattle of Great Britain, the foot and mouth disease has now made its appearance. ......For violation of the German press laws in publishing certain articles, another of the Von Arnim family has been sentenced to three months' imprisonment...... James Kingan, a New York produce dealer, having lost largely in recent speculations, has fled from his creditors. His liabilities are estimated all the way from $400,000 to $1,000,000...... The plasterers of New York city, who have been receiving $2 per day, struck work for $2.50..... Two hotels and the Giles county national bank buildings at Pulaski, Tenn., were destroyed by fire. Loss, $14,000; insurance, $12,000 ...... While the scholars of a school in Coal Run, Ohio, were giving a dramatic representation, Stephen Rundell struck a dagger in the heart of a young man named Mason, by mistake, and killed him instantly in the presence of the audience. They were bosom friends.

HORSEWHIPPING A NURSE.

Brutal Behavior of an English Gentleman Farmer.

The London *Telegraph* says: At the Slough petty sessions, Robertson Francis Morris, described as a gentleman farmer, of Iver Heath, Bucks, and Janet, his wife, were charged with wounding Caroline Carter, a nurse recently in their employment. The complaint was conveyed in a fly from the Slough Union to the police court. The extraordinary nature of the case created considerable excitement in the district.

The prisoners, on taking their place in the dock with their child were hissed by the spectators. Mrs. Morris was fashionably attired in a black velvet coat, hat and feathers. Caroline Carter, seated in a chair, and supported by pillows, gave her evidence while almost in a fainting condition. She said she entered the prisoners' service at the end of May. Mrs. Morris began pinching her on the second day after she went there, and has since persecuted her. About a month ago she broke a poker over her back. She hit her five or six times up in the nursery. Sometimes the baby used to cry at night, and Mrs. Morris said it was her fault. Mrs. Morris also hit her because the baby left his stool, and had since struck her with the poker. The husband was not present when Mrs. Morris struck her, but as she cried and screamed he came up to see what was the matter. She threatened witness that if the child cried at night she would give her (witness) a thrashing in the morning. Witness did not complain to her husband. Mr. Morris had not ill-used her before that. Mrs. Morris had pinched and beaten her daily. She had been horsewhipped by Mr. Morris after he came home from church. In the morning she played with the child up stairs to make it happy, but it began to cry. When they came home she was in the garden with the child, but went up stairs to the nursery to take his things off. Mr. Morris in the afternoon came up with a horsewhip into the nursery, Mrs. Morris having gone out with the child into the garden that it should not hear her. Mrs. Morris saw the horsewhip in her master's hand. He told complainant to lie across the table, but she refused to do it. He then took hold of her arm, got her across a chair, and hit her with the horsewhip over the back, but she could not say how many times. She tried to get away, but Mr. Morris had shut the door, and he pulled up her clothes and hit her across the legs with the whip. That was while she was standing behind the door. The table was split up the middle when he wanted her to lie across it. It was a little table, and when he tried to bend her down across it, it was split in the middle. The woman was not in the room at all while he was striking her with the whip. Complainant cried while he was thrashing her. He hit her once or twice on the legs while her clothes were up.

The whip was a horsewhip belonging to the cook, Thrift, and Mr. Morris hit her with the stick and handle of a cart-whip also. Mrs. Morris then locked her in, so that complainant could not get out. She did not get her dinner till eight o'clock at night, which was a piece of cold meat and two or three potatoes. She had dry bread in the morning and nothing to drink, unless she had some water. She was never allowed down stairs in the kitchen, and when they went out the boy used to fasten the door, so that she could not get in. Mrs. Morris had also hit her once with a whip while getting some coals up. She had not much strength, and Mrs. Morris said she was waiting for some one, and hit her with the whip. Mr. Morris used to kick her, and had done so more than once since the horse-whipping; but the witness could not tell how many times. He had kicked her on the side. Mrs. Morris used to run a dinner fork into her, and make her arms blue. Her arms were all over scars. One morning her arm was all over blood, which ran down her sleeve. That was done with the scissors, because the child had been crying. Mr. Morris ran the scissors into her more than a dozen times one morning. That was the worst time, and took place after Christmas. Last Sunday she ran away. The reason witness's hair was so short was because Mrs. Morris had pulled her hair out with both hands. After she had ill-used her in the day witness was so upset that she did not know what she was doing. She had to keep the fire alight in the nursery all night, and the female prisoner used to come and see that she did so. If she was not up, Mrs. Morris used to pulled her out of bed by the hair of her head. Once or twice she did that. [At this point stimulants had to be administered to complainant.] Mrs. Morris used to push her in the back with a stick—did so more than once. It was a stick used to rake the fire. One morning Mrs. Morris touched her with a dinner knife, and said she would run her through with it and would run the poker down her throat if she screamed so. She was then hitting her on the back with the poker because the child cried in the night. Witness showed the bruises made by Mrs. Morris, when she punched her, to the old housekeeper. Sometimes there would be a piece pinched out; little pieces of skin used to come from the arms. She had a father, eight sisters and brothers, but did not know where they lived. She had no mother.

[The complainant here fainted, and the case had to be stopped for a time.]

Mr. Talbot, secretary of the Princess Louise Home, informed the bench that he could give the entire history of the poor girl, and, if it pleased God that she should recover, she would be taken back to the Home. He hoped the magistrates would adjourn the case so that their solicitor might be instructed.

The complainant having been removed from the court to recover, the chairman announced that the bench had decided to adjourn the examination. The prisoners were then removed to the cells, and as they left the room were again hissed.

What the Sea Tells Us.

If the present crust of the earth did not afford, as it does, the clearest evidence of a time when the earth's whole frame glowed with intense heat; if we could not, as we can, derive from the movements of the celestial bodies, as well as from the telescopic appearance of some among them, the most certain assurance that all the planets, nay, the whole of the solar system itself, were once in this state of glowing vapor; the ocean brine—the mighty residume left after the earth had passed through its baptism of fire—would leave us in little doubt respecting the main features, at least, of the earth's past history. The seas could never have attained their present condition had not the earth which they then encompassed when they were young been an orb of fire. Every wave that pours in upon the shore speaks to us of so remote a past that all ordinary time-measures fail us in the attempt to indicate the length of the vast intervals separating us from it. The saltness of the ocean is no minor feature or mere details of our globe's economy, but has a significance truly cosmical in its importance. Tremendous, indeed, must have been the activity of these primeval fires, under whose action sixty thousand millions of millions of tons of salt were extracted from the earth's substance and added to its envelope.

Don't Lose a Minute.

Keep busy. The man who has nothing to do is the most miserable of beings. If you have no regular work, do chores, as farmers do when it rains too hard to work in the field. In occupation we forget our troubles, and get respite from sorrow. The man whose mind and hands are busy finds no time to weep and wail. If work is slack, spend the time in reading. No man ever knew too much. The hardest students in the world are the old men who know the most. If you lack books, there are free and very cheap libraries, at least in cities, at your command. The man who does not acquire some item of useful information between daybreak and bedtime must mourfully say, with the Roman emperor: "I have lost a day."

CLARK'S "O.N.T." SPOOL COTTON

How, and Where it is Made---The Clark Thread Company---Largest Works in the New World---Acres of Splendid Buildings---Forests of Wonderful Machinery.

The Process of Manufacture.

Down in the Cotton Fields---The Employees' Societies---The Clark Hose Company---A Grand Relief Society---Employees' Centennial Excursion---The Renowned Eureka Club and Thistle Band.

MANY INTERESTING PARTICULARS.

[From the Essex County Press, Newark, N.J.]

At the foot of Clark street, in the Eighth ward of the city of Newark, on the banks of the Passaic, occupying several acres of ground, upon which are buildings, the flooring of which measures nearly eight acres, are situated the largest thread works in the New World, employing about fifteen hundred hands and paying out every two weeks from sixteen to twenty thousand dollars in wages, to be distributed by the employees among different classes and occupations in the city, and from fifteen to twenty thousand per month to other parties here, who, in various ways, are connected with this vast establishment. Although having the largest pay roll of any employers in New Jersey, and contributing more to the welfare and prosperity of the city than all its financial institutions combined, we hear less in the newspapers of this world of wealth makers than of some second-class money lending shop on Broad street. It would be useless for any one to attempt to trace to their source all the varied industries which have entered into the production of Clark's "O.N.T." Spool Cotton, which is sold by every merchant dealing in dry goods, fancy goods, hosiery, notions, etc., in the United States, and contains two hundred yards of that indispensable article, strong, smooth and beautiful. It is made up of

NEARLY FORTY-TWO MILLION DOUBLINGS,

and yet is so fine as to be hardly visible a few inches from the naked eye. The immense capital invested in The Clark Thread Company's Works and the vast volume of business, amounting to several millions per annum, extending to every part of the United States, is one of the principal sources of Newark's prosperity. What it is and the blessings which flow from it, are not realized by one in a thousand of the people who dwell within the sound of their tower bell. Notwithstanding the large amount of money which the establishment was to pour into the hands of every merchant and trader in the city, as events have shown, the first thing which the City Fathers did when these works were being erected was to tax the bricks and material not yet shaped into buildings. It was on a par with the intelligence and appreciation of the

REAL SOURCES OF WEALTH,

usually exhibited by the average politician. Had it been some trust company or curbstone broker that asked exemption, it would probably have been granted. Some idea of the value of these works to the community may be had by an illustration of a thing which might really happen at any time. The Clark Thread Company employ as stated, about fifteen hundred persons, paying out to them sixteen to twenty thousand dollars every two weeks. These hundreds of hands pay out that money to the butcher, the baker, the grocer, the clothier, the dry goods merchant, and all who have anything to sell get a part of it in some way, either directly or indirectly. From their hands it goes to pay debts, meet obligations and fill the channels of trade with the circulating medium called money, and which is to business what blood is to the human system, giving it life, animation and power. Suppose to-night those works were

DESTROYED BY FIRE.

They are fully insured. The Clark Thread Company receive their insurance in cash from their underwriters. They say to themselves: "Business is dull, sales are uncertain, profits are small, the future is unknown, and our taxes are heavy. The vast business requires close attention and persistent energy. We will not take this money and rebuild the works, but adopt the plan pursued by most moneyed men, viz: go to Washington, buy government bonds, bring them home, put them in a tin box, pay no taxes, and sit down to take our ease, eat, drink and be merry, with no thought of care, supported in luxury without risk by the interest on our bonds, paid by taxation of the producing classes." Can any man calculate the wide spread ruin which would follow such a calamity and course of action by The Clark Thread Company? It would be incalculable. All those people who earned money to purchase what they wanted to buy, would be added to the list of paupers who to-day clamor for work or bread. Misery, want,

STARVATION AND CRIME

would be the fruit of such a course. But this is exactly what has been done throughout the country, and explains why one in twelve in Newark are to-day supported by the city. The productive capital of the country, which employed our now idle millions, has been put into government bonds, and appalling destitution and want are on every hand, and increasing at a fearful rate. Labor is the source of all wealth and prosperity, and there is no loss equal to that which follows enforced idleness of the producing classes. There is no music so full of joy and peace and good will to men as the song of labor and the music of machinery. Better far that all other songs be hushed and every note be stilled, rather than those, and to them we now introduce the reader.

ON THE DOCK

of The Clark Thread Company, which is five hundred feet long, is a mountain of two or three thousand tons of coal, drawn out of boats at the wharf by a donkey engine, and the bales of cotton find their way from the same wharf to the brick house, for the storage of that precious material, one pound of which will make one hundred miles of thread, containing about forty-two million doublings. The mind cannot grasp the numerical fact. But four grades of cotton are ordinarily used in the manufacture of Clark's "O.N.T." Spool Cotton, and known as "Sea Island Cotton." This comes principally from South Carolina and is grown on the small islands along the coast. Considerable is raised on the peninsulas and around the bays and inlets, but it is not equal to that of the sea islands, which is the finest in the world. The first bag of this sea island cotton of the crop of 1876 was purchased by the Clark Thread Company at fifty cents per pound. The island cotton is not used in the manufacture of thread, being too short in the fiber. On these sea islands were the richest planters of the South in

THE OLD SLAVE DAYS,

many of them having as high as six hundred slaves, and compared with whom the feudal lords of England were children in luxury, hospitality, and elegance. But to-day all is changed. Those vast estates are cut up into small plantations, many of them owned by the negroes, who now call no man master. They bring in their season's product, sometimes on a mule and again in large quantities. Brokers on the ground or at the landings, buy and pay the negroes for their cotton, often dividing the money according to the labor performed in raising the crop. Some lease the land of the former owners, but the old state of things is "dun clar' gone." This trade and traffic, it may be fairly expected, will in a few years largely increase the wealth and intelligence of the race in these localities.

THE SEA ISLAND COTTON

brings treble the price of inland. An acre will produce in the neighborhood of three hundred and fifty pounds of seed cotton, which when ginned weighs about seventy-five pounds, or one to five. The negroes without doubt will eventually grow all the cotton, as not one in five of the Northern men have thus far succeeded in their attempts. Let the reader remember that we have not looked at a single piece of machinery yet, and then calculate the number of people and the amount of wealth, these works employ and produce, before we reach the factory. The sail, the mine, commerce and manufactures, all find employment to supply The Clark Thread Company's works, and when they stop the cotton may bloom and fall unplucked, the coal miner may starve on a bed of black diamonds, the sails on the rivers be spread to the breeze no more, and the lathes in a hundred shops be left to rust in silence. The manufacture of Clark's "O. N. T." Spool Cotton embraces the islands of the sea and penetrates the bowels of the earth, utilizing the treasures of wealth on every hand, enriching and blessing mankind at every step, from the womb of ages to the spindles of Newark. We will now examine into the immediate sources of the power which drives the endless machinery of this vast hive of industry, with its sixty miles of belting and about seventy miles of steam pipe for heating purposes.

WE ENTER THE ENGINE HOUSE,

itself large enough for an ordinary factory. Here is a mighty production of human brain and brawn. In the presence of this monster, with its majestic tread, one feels his own insignificance and frailty. This vast piece of machinery, moving silently, save the sharp click of the improved steam cut-offs, is equal in power to the combined draft of six hundred horses, and is two engines in one, usually termed a double engine. The fly-wheel, traveling at the rate of forty-eight revolutions per minute and carrying three huge belts on its surface, each two feet wide, is seventy-eight feet in circumference, twenty-five feet in diameter and weighs thirty tons or sixty thousand pounds. The shaft is fourteen inches in thickness, the double cylinders are twenty-six inches in diameter, with condensers, and a stroke of five feet. They were built by Corliss, in 1874. One of the three belts on the fly-wheel is one hundred and fifty feet in length. But even this double monster could not run the works. It has a big twin brother, and together they travel every day for ten hours on their endless journey, and never get tired. They are wonders of power and elegant workmanship, worthy of a visit from any one who wants to see the

BIGGEST PAIR OF TWINS

in New Jersey. They are supplied with steam from nine immense tubular boilers and four large upright boilers, Corliss' plan. They consume twenty-five tons of coal per day, which will give some idea of the amount of steam necessary to drive the immense establishment. Besides these there are three ordinary sized engines, made by Watts, Campbell & Co., of Newark, in different parts of the works, making seven in all, a grand total of nearly fourteen hundred horse power. The young mountain of coal, which looks enough to last the whole city a year, is rebuilt by two hundred and fifty ton boat loads, at brief intervals.

MANUFACTURING THE THREAD.

The cotton is brought in bales to the mixing rooms, when it is examined and placed in bins, according to the different grades, ready for the scutching machines, which open and beat the material, cleaning it from the dirt and sand it contains in the bale. After going through the scutching machine, it comes out in the shape of a roll, like wall paper, comparatively soft, white and clean. It is, however, really in a very rough state, compared with the fineness and perfection that is to be reached. Several of these scutching machines are running continually, and their sound is like the roar of a lightning express train, as it whirls past the platform where you stand. The first scutcher is fed with the bale cotton from a hopper which lets it through into knives set in large rollers, which revolve with tremendous force, and lightning speed, picking the cotton into small pieces, and passing it by suction of air, on to other rollers, between which it goes and comes out in the shape of a web or "lap" in large rolls. Four of these rolls are then placed upon a machine like the first and run together through the same process of

PICKING AND BEATING AND CLEANING,

when it comes out again in the same shape as before, rolled to exactly the thickness which it is desired to make the "sliver" from which the thread-yarn is to be spun. What a "sliver" is will be learned further on. The machine is so delicately set that it regulates the thickness of the web or lap to within half an ounce, in a web of five feet, weighing only twelve to eighteen ounces. After being put through three scutching machines in this way and coming out with eight thicknesses of web or lap similar to that produced by the first process, it is ready for the carding machines. This department is filled with Carding Machines, Drawing Frames, Lappers, and Combing Machines, a perfect labyrinth of belting, pulleys and machinery, the noise of which is like the roar of many waters mingled with the clatter of a thousand wheels. One of the large rolls of web or lap that came from the last scutching machine is placed on a carding machine, which takes and runs it

BETWEEN THE TEETH

of a large and small cylinder for the purpose of drawing out the entangled fibers and laying them parallel or in the same line of direction and also to remove the small pellicles or motes which may have escaped the action of the scutching machine. After being treated in this way, a comber or doffer takes the web from the small cylinder, which is now a delicate guaze; and it is gathered up and passed through a small hole, say half an inch in size, after which it is coiled in a revolving can. The whole process is one of wonderful delicacy, the material being so finely worked that a breath of air would break it. This card contains ninety thousand square teeth to a foot, or a total of four million one hundred and eighty-six thousand. On the carding machine is a little joker that works like some old man, raising the wire covered flats from the teeth of the carder, which it cleans, and throws off the particles of dirt and coarse cotton left on them. Six of the

TIN CANS CALLED CARD SLIVERS,

in which the roll is wound are now taken to another machine called a Drawing Frame and run together into one "sliver." These six are so light that when they are passed together through a hole and made one, they fall into another sliver and are then no larger than one of the six from which it was made, although they have not yet been twisted at all. Fourteen of these cans full of slivers are placed at the "Lapper" and run between two rollers, making a new web nine inches wide and half an inch thick, which comes out like the original roll from the scutching machine that takes the cotton from the bales, only that now it is soft and delicate as is possible to conceive, weighing only one hundred and forty-five grains to the yard, nine inches wide. It now goes in rolls to a wonderful little machine, a French invention, first introduced in this country by The Clark Thread Company. It is a refined carding machine, the product of which is as much superior in fineness to the large carders just described as the most elegant silk goods are to

THE COARSEST COTTON CLOTH.

It is called the French combing machine and is only used by the best thread makers, as it is very expensive and while it makes the thread superior in quality, it adds twenty per cent. to the cost of manufacture. Six of the rolls of webbing are now passed together through the combing machine between two rollers, and combed by innumerable steel teeth to the fineness of gossamer and the thinness of a spider's web. It passes on, is gathered in one soft round "sliver" again, goes through rollers once more, when it is coiled into cans as before, with a loss of twenty per cent. on the material which composed the web when it was put on the French machine. It is a texture so fine and soft that one cannot but wonder how it bears its own weight. After the last process, six of the slivers are again put through the drawing frame making one sliver no larger than any of the six from which it is drawn. Then six of these last are put through the same process reducing them in size six times, and adding that to the length. This is repeated three times, and each time they are coiled into cans. The last sliver is the same size and weight as when the process began, although doubled four hundred and thirty-five thousand, four hundred and fifty-six times. The last cans are now taken to

THE FIRST SLUBBING FRAME,

from which cans they are passed through rollers, then twisted to about the size of a lead pencil, and wound on bobbins, all by the same machine. From this they go to the second slubbing frame, where one hundred and two splinters on each machine are winding yarn from two hundred and four bobbins, which came from the first slubber, two threads being wound upon one spool. The next or intermediate slubbing machine winds upon one hundred and seventy-six spools, from three hundred and fifty-two bobbins, which came from the second slubber. The next and last is called the roving machine, and fills two hundred and forty spools which came from four hundred and eighty bobbins, from the intermediate slubbing machine. By this repetition of doubling and twisting the yarn is fast becoming strong and hard. We now follow the yarn called "roving" to the self-acting "mule," which makes eight hundred and forty threads of yarn from sixteen hundred and eighty bobbins. This wonderful machine, two of which are operated by one man, draws out the yarn and twists it from sixteen hundred and eighty spools, when it comes away, and on its return winds it on eight hundred cops (spools) making the last number of thread yarn. We now come to

THE THREAD MILL,

which is a distinct and independent department. The cotton yarn comes here, and first goes to the cop winding machines, where it is run from the cops, through delicate balances, over soft felt ground, upon bobbins, two threads together upon one. From the cop winding department, the bobbins go to the slinging department, where the two threads that were run together on the spool, in the cop winding department, are twisted or spun in one thread. The thread, as it is unwound, runs through water, and rapidly over glass guides, and the bobbin which receives it revolves five thousand times per minute twisting hundreds of threads on each machine. After being twisted two threads together, making one hard thread, three of the latter are again run together on a bobbin, the same as in the first cop winding department. Three of these are now twisted together, making six strans, and

THE PROCESS OF TWISTING THEM

is exactly the same as the one last described. It is known as the finishing twisting department. When the thread comes from the finishing twisting department, it is inspected with the greatest care, by skillful persons, and put through several tests before passing the reeling department, to be wound in skeins for the bleach house. The machines in this department are very curious, and daily turn out vast quantities of thread, which is packed, and given a through ticket to the bleach and dye houses. They measure off the thread into skeins of an exact length and size, and when they have reeled off just the right amount of yarn, always stop, and unlike some kind of yarners, they never forget to tell the same story without variations. Again after coming from the reels.

THE THREAD IS CAREFULLY INSPECTED,

the work employing several girls, who take all the rough and imperfect thread from the hanks. After this second inspection, we find it next in the bleach house. The bleach and dye houses are among the most interesting departments of this vast establishment, although not the most agreeable. The progress in washing machinery, that is here exhibited, would make our grandmothers think that the millenium had come. The baby washer, as we call it, of this concern, is rather a large child, whose place and uses will appear later. After the thread is sent from the inspection department to the bleach and dye houses, it is unpacked, counted and put into large tanks, immense loads at a time, and boiled by steam for several hours, which takes out the dirt and

CLEANS IT PERFECTLY.

It is then put through washings oft, and preparations wonderful and curious. The water used, we judge, would have increased the flood just about enough to have lifted Noah's ark from the snag on Mount Ararat. Some of the wash tubs are of stone, and all are on a scale equal in magnitude to any of Col. Seller's schemes for making millions. The loads of thread are put in and taken out of boilers, rinsers, washers, dryers and half a dozen other processes by machinery. Then after all this, it goes right back to those huge steam boilers, and the same thing is done over again. The dry room is heated by seven thousand five hundred feet of steam pipe, and can be regulated to any desired temperature. After leaving the reeling department, the thread that is to be colored goes to the dye house, and that which is to remain white, to the bleach house. In the dye house is the patent dyeing machine, used only to dye black. It does the work far better than by hand and is equal to the labor of more than a dozen men.

ALL COLORS OF THREAD

are made, and the quantities of soaps, dye stuffs, and other material of the kind used, are immense. Eighty thousand gallons of water are consumed daily in the bleach house alone, and one of the Artesian wells of The Clark Thread Company has a capacity of one hundred and fifty thousand gallons per day. This is a remarkable well, sixteen feet deep and eight feet in diameter, of which Professor Maynard, the New York chemist, said it produced the purest water he ever saw. It makes a man thirsty to look at it, and is absolutely free from any particles of matter, by chemical test. The thread is blued on a big scale, which gives that handsome tint so greatly admired by the ladies. Then it is committed to the tender mercies of the baby washer, which are cruel, and goes through it ten times. The baby is built like an ordinary washing machine, but each of the rollers weighs a thousand pounds, and as the thread passes through the water into the washer

THEY HOP AND JUMP

and pound with antics queer, but it does the business thoroughly. This was formerly done by the old fashioned pounder and barrel which our grandmothers used to set us at when we were boys, before going to school in the morning. Then it is drawn through the rinser, which is a simple and novel machine, continually supplied with pure Artesian well water. The thread passes over a roller into the water, comes up again over another roller, then down into the water, and up and down, and out and in, and out and up over the reels into great boxes on wheels, from which it is put into a large water extractor, a perforated hollow cylinder, revolving several thousands times per minute, and then it is transported to the drying room. In this way five hundred heads can be rinsed in four minutes which used to take an hour and a half. After the thread has come out of the drying room,

COLORED OR UNCOLORED,

it goes to the warerooms, where it is counted and put in packages to be given out preparatory to being wound upon spools for the market. The thread having reached this stage of perfection, has become very valuable and is looked after with the greatest care. Tickets direct it to its different departments and denote its size, quality, etc. The inspection and testing of thread is one of the most important features in its production, and it would surprise the lady who sews day after day with Clark's "O. N. T." Spool Cotton, to know by what patient and constant care the perfect smoothness and regularity of the thread was secured. It is now taken to the hank winding department and wound upon large bobbins, when it is ready for its last wind upon the spools, from which it is taken by the consumers for its thousand uses of necessity and utility, from tying the rag on the boy's whittled and bloody finger, to the delicate embroidery of the wedding garment.

THE SPOOLING DEPARTMENT.

The spooling room is a busy place, where spools of thread of all sizes and colors by tens of thousands are wound every day, two hundred yards on a spool. The self-acting spooling machine is a marvelous piece of mechanism. The spools are placed in an iron gutter by the operator, when the machine picks them up, puts them on a shaft eight at a time, winds the thread upon them at the rate of three thousand revolutions per minute, cuts a little slot in the edge of the spool, catches the thread in it, nips it off, drops the spools full of thread into boxes below, picks up eight more empty spools, places, winds and drops them as before, and never makes a mistake. The machine, which is used in this country only by The Clark Thread Company, was exhibited by them at the Centennial, and with their magnificent case of goods, was one of the great attractions among the many wonders of the exhibition. From the spooling department, the spooled thread is taken to

THE WAREROOM,

where the beautiful little label containing the name, number, etc., of the thread, is put on by girls. The quickest of them will put labels on the ends of nine or ten thousand in a day, all of which have to be moistened by the tongue, placed on the spool, and then struck with the hand to paste it. Some of these girls work about as quick as lightning. After ticketing, the spools of thread are put into boxes of one dozen each. They are then ready for packing. About twenty-five thousand feet of lumber per month is cut at the mills, in Michigan, to the various lengths required, and all that is done here is to put the boxes together. A private wire runs from the works in Newark to the New York office, and the line is kept busy in sending orders and transmitting messages of the company. In the short time we were there several large orders came in from different parts of the country, and among them were some from Maine, Texas, California, Wisconsin, Oregon, etc. The Clark Thread Company sends out annually vast quantities of show cards, calendars, etc., some of which are magnificent specimens of the lithographic and printer's art.

IS THIS A FAIR COUNT?

The number of feet of draft which one pound of cotton undergoes is one trillion, seven hundred and seventy-two billion, three hundred and twenty million, six hundred and thirty-five thousand, six hundred feet, or stated in figures, 1,772,320,635,600, a distance of 335,477,582½ miles. The following demonstrates the apparently incredible statement: The web of cotton from which this immense length of thread is drawn is forty inches wide. It goes to the carder, where it is drawn to 4x120, equal to 480 feet. Then the drawing frame increases it to 480x6, equal to 2,880; the lapper 2,880x2¼, equal to 6,480; the comber draws it out to 6,480x26, equal to 168,480; then it goes to the first head drawing frame, where 168,480x6 equal to 1,010,880.

THE SECOND DRAWING FRAME

multiplies the last length by six again making 1,010,880x6 equal to 6,065,280, which repeated on the third drawing frame makes a length of 6,065,280x6 equal to 36,391,680 feet. Now comes the first slubbing frame where 36,391,680x5 is equal to 181,958,400; the second slubber 181,968,400x4½ equal to 818,812,800; the intermediate slubber 181,958,400x6 equal to 4,612,876,800; the finishing thread winding machine makes the total length of the thread 4,912,876,80x6 equal to 29,477,260,800. Now it goes on bobbins to the "mill" where 29,477,260,800x9¼ gives us 272,664,662,400 feet. We then multiply the last number of feet which states the total length of one pound of cotton drawn into thread, by the length of the original web, which is six and a half feet, and have the total as stated before 272,664,662,400x6½ feet making a grand total of 1,772,320,635,600 feet. The cotton, when finished as yarn, has been doubled six million, nine hundred and sixty-seven thousand, two hundred and ninety-six times (6,967,296), in passing through the different processes. When the yarn is made into six cord finished thread, the above number of doublings have been multiplied by six, making a total of 41,803,762 doublings. Now divide the total draft, 1,772,327,632,600, by the total doublings, and if the work is correct, we shall have the total number of feet of yarn in a pound of cotton, which is 254,337 feet. But there has been 20 per cent. loss in the manufacture, which must be added, making a total of 305,254 feet of yarn for a pound of cotton, or 120 hanks of 840 yards each, enough to reach from New York to Trenton, a distance of sixty miles.

MACHINE AND CABINET SHOPS, BOX FACTORY AND PRINTING HOUSE.

The Clark Thread Company do all their printing and lithographing at the works here. Four printing presses are kept running all the time, and in the lithograph department one steam press and six or eight hand lithograph presses are continually employed. In both departments the practice of the "art preservative" is in the highest style. Orders for the paper box department in the one item of straw board are given as high as eighty to one hundred tons at a time. In the machine shop a large number of men are employed in making new machinery and keeping in repair the vast quantity in use in the various departments of the works. The cabinet factory turns out about two hundred cabinets per day. The bobbins, etc., used in the mill are made here. In fact about all the Clark Thread Company go outside for is the raw material. They manufacture all they use, except a few of the more intricate or patented machines.

THE CLARK HOSE COMPANY.

One of the best organized and equipped fire companies in the city of Newark is the "Clark Hose Company," organized May 15th, 1869. There are twenty members, employees of the factory, brave active men, trained by frequent practice to their duty, and proud of their company and outfit. Their equipment is as follows: Two hose carriages with wrenches, bars and axes, carrying seven hundred and fifty feet of hose on reels and two pipes with extra nozzles. They also command nine hundred feet of hose with pipes and nozzles in twenty-one different stations, in and around the factory, one Cameron fire pump, one Worthington, one Watts & Campbell, and one Blake pump, one hundred and seventy-eight filled buckets in their proper places throughout the works, sixteen hand pumps, sprinklers in all the rooms of the cotton mill, the packing house, the machine and carpenter shop and the drying rooms. There are also sprinklers in the two top floors of the thread mill and in the warehouse, and there are thirty-five fire plugs or hydrants on the premises. Regular meetings are held on the second Monday in each month, and practice is had every two weeks. Examination of all valves, hydrants, pumps and other equipments takes place on the first of each month, and a minute report of the exact condition, position and effectiveness of the fire service is made to The Clark Thread Company.

THE CLARK THREAD COMPANY RELIEF SOCIETY.

One of the best and most beneficial organizations which constitutes a part of the system and care of the Clark Thread Company for their employees, is the Relief Society. It was organized January 22d, 1870, for the purpose of providing a fund for the relief of those who might, by accident or sickness, be incapacitated from sustaining themselves. All the employees of the company must be members of the society, and each receives assistance when needed, from the fund according to the amount paid in, which must be at least one cent per week, but no one is permitted to pay in an amount which would draw, in case of sickness, more than half their average weekly wages. Every cent paid in draws seventy-five cents per week. The Clark Thread Company contributes five dollars per week to the fund without cessation, but all others cease their contributions when the unexpended balance in the treasury reaches fifteen hundred dollars. When the fund is reduced to seven hundred dollars, payments are renewed. The payments into the treasury average about nine months in the year. We hope that this humane and systematic organization may find many imitators among the manufacturers of Newark and throughout the country, who read this article. The company pays interest at seven per cent. on the money in the treasury, besides their five dollars per week into the fund. Since its organization one thousand three hundred and ninety-seven members have been relieved, and twenty-four deaths have occurred in the society. The reason that the receipts for 1874 and 1876 are less than usual is because the fund had reached the maximum of $1,500, and payments were stopped. The following very interesting table shows the amount received and paid out from 1870 to 1876 inclusive:

Years.	Receipts.	Payments.
1870	$1,742.34	$1,504.28
1871	2,247.95	2,010.82
1872	2,114.42	1,704.88
1873	2,381.57	1,742.21
1874	856.60	1,595.59
1875	1,541.01	1,624.75
"	77.04	
1876	953.31	1,751.94
Total	$12,923.34	$11,936.52

Balance in treasury Jan. 1, 1877, $986.82.

HOW CLARK'S "O. N. T." SPOOL COTTON ORIGINATED.

Until within a few years, the great difficulty to be overcome in the introduction of sewing machines, was the objections made by manufacturers and operators to the then popular threads. These complaints were so loud and well founded that the sale of sewing machines was greatly impeded on account of the impossibility of obtaining a thread adapted to their use. Mr. George A. Clark, appreciating the difficulty, introduced into the American market the now famous Clark's "O. N. T." Spool Cotton, all numbers being Six Cord, from 8 to 100 which met the demand, did away with all complaints, and long since established its reputation as the best thread in use for sewing machines or hand sewing. To Mr. George A. Clark belongs the credit of being the first to supply those fine qualities of Six Cord Spool Cotton with which his name is associated. The thread is used and recommended by agents of the Singer, Wheeler & Wilson, Grover & Baker, Domestic, Howe, Florence, Weed, Wilson, Blees, Remington, Secor, Home, Lathrop and other sewing machine companies. The superior quality of Clark's "O. N. T." Spool Cotton soon secured for it an immense sale, but with the great popularity of the goods came also counterfeits which made it necessary for the manufacturers to adopt a trademark for their own and the public's protection, and now upon every genuine spool of their thread is the following:

This trademark is familiar to every merchant in the United States, and all who have ever tried the genuine Clark's "O. N. T." Spool Cotton, continue to use it.

EMPLOYEES AT THE CENTENNIAL.

A noticeable feature of The Clark Thread Company has always been their thoughtful and considerate attention to the welfare and pleasure of their employees. The Centennial Exhibition afforded an opportunity for its practical illustration which should not pass unnoticed in this article. Desiring to give all their operatives an opportunity to witness the great Exhibition at Philadelphia of what the nation had accomplished during the first hundred years of its existence in industry and art, the company planned and carried to complete success a monster excursion to Philadelphia, which embraced their fifteen hundred employees, with invited guests, members of the press, and the Mayor and Common Council of the City of Newark. Some idea of its extent may be gained when it is known that forty-five railroad coaches were employed for their accommodation, and the cost for transportation, admission, entertainment, etc., exceeded six thousand dollars. But this large sum is small compared with the unalloyed pleasure which was afforded the grand army of industrious people who find employment at the Clark Thread Company Works in Newark. The Common Council passed and caused to be beautifully engrossed and presented to the Company, a series of resolutions from which for lack of space we copy only the following extract:

Resolved, That we witnessed with great satisfaction the kindness and attention shown by the officers of this Company to their fifteen hundred working people and the evident good feeling that exists between them; recognizing that when labor and capital thus harmonize, prosperity must ensue.

Resolved, That the location of the CLARK THREAD COMPANY in our city, with their immense works, and their army of operatives, has proved a vast benefit, and that Newark is and should be, justly proud of her manufactures on which her growth and prosperity must ever depend, and that this municipality should foster and encourage by every proper means their establishment and success.

Resolutions of thanks to the Company were also passed by the employees.

THE EUREKA BOAT CLUB AND THISTLE BAND.

The now famous crew, which came so near winning the prize against the world at the Centennial International Regatta last August, is from The Clark Thread Company's Works principally. It has a list of thirty-five active and about forty honorary members. It is the champion crew of the Passaic, and has beaten the celebrated Atlantic crew, of New York. They won the first heat on Monday, August 28th, 1876, at Philadelphia, beating the Dublin and Argonauta crews. On the second day they were beaten by the celebrated Beaverwycks, of Albany, by only six seconds, the Beaverwycks winning the championship of the world on the last day, the Newark boys of The Clark Thread Company coming very close to the championship of the world.

The Thistle Band, one of the best in the State is organized from the employees of the company and plays for all the many excursions and festivals of the employees, besides answering outside calls when made. They accompanied the Eurekas to Philadelphia, and also the grand excursion of the employees to the Centennial last year, and always play at all the regattas in which the Eurekas take part.

THE NEW YORK HOUSE.

At No. 400 Broadway, corner of Walker street, New York, is the splendid marble building of George A. Clark & Brother, the selling agents of The Clark Thread Company. The entire five stories of their magnificent place are fitted up with every facility possible for the prompt transaction of their immense business.

The Appropriation Bills.

The following are the amounts of the appropriation bills passed this year by the American Congress, compared with last:

	Amount of Bill.
THE PENSION BILL.	
As it became law	$28,553,500.00
As it became law last year	29,533,500.00
POST-OFFICE BILL.	
As it became law	$33,267,390.00
As it became law last year	34,585,701.00
FORTIFICATION BILL.	
As it became law	$300,000.00
As it became law last year	315,000.00
CONSULAR AND DIPLOMATIC BILL.	
As it became law	$1,136,847.50
As it became law last year	1,187,197.50
LEGISLATIVE BILL.	
As it became law	$15,314,961.00
As it became law last year	15,373,960.00
MILITARY ACADEMY BILL.	
As it became law	$286,604.00
As it became law last year	290,065.00
INDIAN BILL.	
As it became law	$4,751,499.12
As it became law last year	4,572,762.01
THE DEFICIENCY BILL.	
As it became law	$2,398,956.53
As it became law last year	2,908,177.09
THE NAVAL BILL.	
As it became law	$13,549,952.40
As it became law last year	12,742,155.40
THE SUNDRY CIVIL BILL.	
As it became law	$17,570,229.32
As it became law last year	16,351,474.58
THE SENATE AND HOUSE DEFICIENCY BILL.	
As passed Senate	$139,254.98
As it became law	139,254.98
PRINTING DEFICIENCY BILL.	
As it passed Senate	$350,000.00
As it became law	350,000.00
TOTALS OF APPROPRIATION BILLS.	
As estimated	$189,105,114.80
As reported to House	135,663,798.87
As passed by House	132,980,564.06
As passed by Senate	152,793,195.15
As they became laws	118,599,195.65
As they became laws last year	117,859,992.58

Found his Boy.

Not long after the stealing of Charley Ross, a little son of Henry Dochmueler, of St. Louis, was stolen. The father had but little property, and was unable to pay the expenses of an extensive search; but he shrewdly hit upon a plan for accomplishing the object effectually. He read the newspapers carefully, and whenever he saw an account of the finding of a supposed Charley Ross he sent to learn if the boy was not his lost one. At length, two years after the kidnapping, he saw an account of a stray boy in Illinois, and, on going there, he found what he had been so long in search of. The child's hair had been dyed, and he had changed much through sickness and deprivation, but there was no doubt as to the identity. He had been stolen by wandering beggars, who had made his pretty face profitable in exciting sympathy. The father is now prosecuting the supposed kidnappers.

She Didn't Understand.

Two young ladies called at a dry goods store on Woodward avenue, says the Detroit *Free Press*, to look at one of the late styles of circulars. The one who wanted to purchase was amazed and disappointed to find the circulars made without sleeves or armholes.

"Well, that's the style," said the salesman, "and they are very popular. They are meant to cover both shoulders and arms."

"I guess I won't buy one," whispered the girl to her friend. "If I had a beau how could I take hold of his arm with that circular on?"

"Why, you goose!" replied the other, "you let him put his arm right around you, of course! That's what it's made that way for?"

"Mister, I'll take that circular!" promptly observed the anxious party, and she had it sent home.

Riding Habits.

The fashion critic of the London *Court Journal* says: A few years ago riding habits were so long that accidents were of frequent occurrence; they are now so short that they are not habits. I was standing the other at the railings in the park, when a young lady on horseback passed me. I presume she wore a "riding habit," but were I asked to make an affidavit that she was not attired in trousers my strict love of veracity would prevent me from doing so."

The English Colliers.

The condition of the colliers in England is becoming daily more serious. In almost all coal districts many men are idle, and others are working on notice to leave, while the wages of those who remain are being reduced. In the county of Durham alone between 10,000 and 11,000 are reported to be idle, and the secretary of their union has made an appeal on their behalf.

The Markets.

NEW YORK.		
Beef Cattle—Native	10	@ 11¾
Texas and Cherokee	09	@ 10
Milch Cows	55 00	@60 00
Hogs—Live	04	@ 06
Dressed	07½	@ 07¾
Sheep	06½	@ 07
Lambs	06½	@ 08
Cotton—Middling	12½	@ 1 ¾
Flour—Western—Good to Choice	7 05	@ 8 25
State—Good to Choice	6 00	@ 6 45
Wheat—Red Western	1 30	@ 1 30
No. 2 Milwaukee	1 42	@ 1 42
Rye—State	83	@ 90
Barley—State	62	@ 63
Barley Malt	1 00	@ 1 00
Oats—Mixed Western	38	@ 44
Corn—Mixed Western	54½	@ 55
Hay, per cwt	65	@ 70
Straw, per cwt	70	@ 80
Hops.........76's—1 @17 ....75's	06	@ 10
Pork—Mess	14 50	@14 75
Lard—City Steam	11½	@ 11¾
Fish—Mackerel, No. 1, new	18 00	@19 00
" No. 2, new	9 00	@ 9 50
Dry Cod, per cwt	4 75	@ 5 25
Herring, Scaled, per box	16	@ 18
Petroleum—Crude.......10¾@10¾ Refined....16		
Wool—California Fleece	23	@ 30
Texas "	24	@ 28
Australian "	38	@ 41
Butter—State	23	@ 25
Western—Choice	20	@ 22
Western—Good to Prime	1	@ 17
Western—Firkins	12	@ 15
Cheese—State Factory	13	@ 15
State Skimmed	05	@ 07
Western	10	@ 15
Eggs—State and Pennsylvania	16	@ 1½
BUFFALO.		
Flour	7 00	@10 00
Wheat—No. 1 Milwaukee	1 50	@ 1 50
Corn—Mixed	50	@ 50
Oats	37	@ 37
Rye	90	@ 90
Barley	60	@ 60
Barley Malt	1 00	@ 1 10
PHILADELPHIA.		
Beef Cattle—Extra	06¾	@ 0 ¾
Sheep	04½	@ 07
Hogs—Dressed	08½	@ 09¾
Flour—Pennsylvania Extra	5 75	@ 5 75
Wheat—Red Western	1 51½	@ 1 55
Rye	75	@ 80
Corn—Yellow	54½	@ 55
Mixed	54½	@ 54½
Oats—Mixed	38	@ 39
Petroleum—Crude......11 @11 Refined....15¾		
WATERTOWN, MASS.		
Beef Cattle—Poor to Choice	5 75	@ 8 50
Sheep	2 50	@ 6 50
Lambs	2 50	@ 6 50