## A WORLD OF PAPER.

**One-Third of the Product Made in America—The First Discovery in a Hornet's Nest—Paper's Wonderful Uses and Probabilities.**

The common wasp, the terror of the small boy in the country, was undoubtedly the pioneer in the paper business, and to this despised and abused insect the *Herald* is disposed to award ample credit. The wasp made his paper, too, very much the same way that his human imitators do to-day, using often the very same material and producing in his rude way a species of paper nearly as delicate as the finest tissue grades. Who will say, therefore, that nature is not a great teacher? Spiders were spinners of intricate webs before cloth was invented, the silk worm disclosed to the world a mine of industry and wealth which it is impossible to estimate, and the beaver gave to man his earliest and most valuable lessons in dam building. It is recorded in history that in 670 B. C., Numa, who lived 300 years before Alexander, left several works upon papyrus, and that this is probably the earliest authenticated use of this material. As far back as 1,800 years ago the Chinese are thought to have discovered how to make paper from fibrous matter reduced to pulp in water. About the year 706 A. D. an Arabian manufactory of paper from cotton was established. In 1151 the Spaniards manufactured from cotton various kinds of paper scarcely inferior in quality to those made from linen rags. Linen paper seems to have been first used in England about the year 1342, and it gradually supplanted that made of cotton. The French erected their first paper mills in 1314, and the Germans began the manufacture at a not much later date. John Tate built the first paper mills of England at Hartford in 1498. But France supplied England with most of her paper until Louis XIV. drove out the Huguenot manufacturers, many of whom, after emigrating to England, began making a fine white quality of paper, not produced before in that country, where from that time the paper industry enlarged and prospered until soon more than enough of the material was manufactured to cover home consumption. The ancient hangings of tapestry were superseded about the year 1640 by wall paper of beautiful designs.

In 1728 a patent was granted to erect the first paper mill in New England, which went into operation in Milton, Mass., in 1730, but was discontinued after several years, and revived again in 1760. The first paper mill in the United States, however, was erected near Philadelphia in 1690. The Milton mill is supposed to have been erected by Daniel Henchman, an enterprising bookseller of Boston. About the year 1768 Christopher Leffingwell established the first paper mill in Connecticut at Norwich. In 1770 the number of paper mills in Pennsylvania, New Jersey and Delaware was forty, and the value of their annual product estimated at £100,000. At the beginning of the Revolutionary war Massachusetts had three small paper mills, New Hampshire none, and Rhode Island one, out of repair. Paper was very scarce, and poor in quality.

The process pursued for generations in Europe was substantially followed until 1759, when cylinders with sharp steel blades for tearing rags—invented in Holland—began to be used in other countries in place of the slow-working and tedious stampers heretofore employed to reduce rags to pulp. In 1790, while the wife of an English papermaker was busy with her usual washing, in passing a vat in which pulp for her husband's paper lay, in an advanced state of preparation, she accidentally dropped therein a bag containing powdered blue. The husband, however, made the colored pulp up into paper, which proved so superior in quality that it obtained four shillings extra for it in the London market; and thus, curiously enough, the process of blueing paper was discovered. But the most important discovery, one destined to develop an epoch in the history of paper-making, came out in 1779, when Louis Robert, a common workman in a paper mill at Essonne, France, first mastered the principle of making paper in an endless web. But the machine he it was reserved for Messrs. Henry and Sealy Fourdrinier, wealthy London booksellers and stationers, who, in 1804, purchased the patent-right for Great Britain, to make the invention widely known to the world and to greatly improve it; and to-day the principal paper machine used still bears the name Fourdrinier. By the old hand process three months were needed, dating from the day the rags came into the mill, in which to complete the paper ready for delivery; by the Fourdrinier, the same amount of work may be done in a single day. John Ames, of Springfield, Mass., in 1822 invented a celebrated cylinder machine, which is now used in all coarse papers.

It is an indisputable fact that fully one-third of all the paper used in the world is manufactured in the United States, and a very large proportion of this amount is produced from mills in Massachusetts. After the Ames, in Springfield, could no longer be called the largest paper makers in the United States, that honor fell to Pratt & Smith, of Lee. At the present time, however, Holyoke enjoys the proud distinction. The talk there is all paper, the same as it is all ores and mines in Leadville, or wheat in Chicago, or politics in Washington. It was not until as late as 1853 that the first paper mill was erected in Holyoke, and to-day she makes more fine writing paper than any half-dozen cities and towns in the world combined. The annual product of the paper of the country amounts to 640,500 tons—about 1,830 tons daily. It is estimated that, of wood pulp paper alone, 52,000 tons per year are made. The total exports of the last fiscal year equaled $1,293,312, having grown from the comparatively insignificant sum of $3,777 in 1860, while our imports, on the contrary, have dwindled down to the maximum of $1,326,460 in 1873 to a total amount of only $135,48. for papers of all kinds in 1878. Our paper mills—927 in number—represent a capital of at least $100,000,000, and employ 22,000 persons, who are paid in salaries about $10,000,000. The entire paper interest, including manufacturing, printing and publishing, gives employment, it is estimated, to 75,000 individuals.

It would be difficult to specify the different uses to which paper is applied, and wholly impossible to anticipate its varied uses in the future. There are now twenty-five or thirty different grades manufactured, ranging all the way from the finest tissue and writing to the coarse material used in roofing and sheathing. It has been well said before, that, so common is the use of paper, so plentiful on every hand, so woven into the pathway of every walk of life, we entirely fail to appreciate how necessary and important it is, and must ever be, in all the works of human existence. What would the world be without the ability to command a sheet of paper? It is the chief foundation-stone of all business structures, and is an actual and necessary component part of the ordinary conduct of social, political, literary and religious life as well. While paper manufacture has reached a notable height, no one will believe that it has yet reached the zenith of its advancement and power. In the articles which enter into the product there are new discoveries every few days. Formerly it was believed that only rags could be used as the chief body of the material, but now straw and wood largely take their place, and hence a reduction in price, and a consequent more useful factor is obtained in the dissemination of intelligence among the masses.—*Boston Herald.*

### Curious Cure for Dyspepsia.

Dr. Constantine Paul, of Hospital La Riboisiere, has many dyspeptic patients, and he washes their internal improvements with an invention of Dr. Faucher. A smooth india rubber tube is screwed to a glass funnel large enough to hold one pound of water. The doctor holds the funnel in his left hand, and with his right hand introduces the end of the tube into the throat, pushes lightly and the patient swallows. When thirty-six inches of the tube have been introduced the doctor ceases its further introduction. Water is poured in the funnel, which is held above the patient's head. The water flows into the intestines. When the doctor would withdraw the water, he lowers the funnel to the floor, the tube acts as a syphon and the water flows out. Internal application of many medicines is possible in this way, and the invention is expected to be of great use in treating yellow fever and other epidemics.

If your lamp is heavy a bit of long, narrow paper will make a lamp lighter. —*Marathon Independent.*

## HORRORS OF A FAMINE.

**A Terrible Picture of the Sufferings of the Natives of Brazil.**

The United States consul at Pernambuco, Brazil, writes to the assistant secretary of state, giving details of the terrible suffering in Northern Brazil, caused by the protracted secca or drought. He says: Two note1 seccas prevailed during the years of 1825 and 1845, but I doubt whether there has ever been here or elsewhere, in the history of the world, a famine so fatal in effects in proportion to the population as this of Ceara. Those of India and China, it must be considered, occurring in crowded countries, where the people are counted by millions, and not by thousands like the Cearenses. Two years and a half ago, when the secca commenced, the province of Ceara numbered 900,000 inhabitants; out of these 500,000 have died of disease and starvation.

The secca began in the summer of 1876, and continued to the close of the year 1878, lasting for thirty months; no rain having fallen during the whole two years and a half, and the once fertile and luxuriant Sertao, where the farms and villages prospered in peace and plenty, now presents the appearance of a vast blackened desert, burnt over by fire.

In November of 1876, after the "Eastivete" or summer sleep, when the "Chuvas de Cajus," or fruit rains, failed to appear, the people did not worry, as their acueles, or ponds, were not exhausted, and they looked confidently forward to the winter rains to set everything right. But these never came, and, as the dry spring advanced, sad accounts began to come eastward of poverty and suffering among the poor. Later on, as the burning summer slowly passed, bringing no November showers, and another January went by without rain, there came appalling news of famine, disease, dead cattle, and of dying and despairing people.

Long penitential processions were formed and the miserable Sertanejos beat, cut, and otherwise punished themselves to appease an offended Deity. But the pitiless secca still continued, threatening everything and everybody with the inevitable destruction.

The wretched people were now reduced to the necessity of eating roots, cotton pods, the Mucuma bean, which produces dropsy, lizards, dogs, cats, rats, roaches, any living or dead thing capable of affording sustenance; and in some instances they were even goaded to cannibalism by the pangs of hunger.

To increase the unimaginable horrors of the situation, the smallpox broke out among the Sertanejos and became epidemic; typhus and other fevers were raging, and in February and March of 1878 the mortality became frightful.

The cattle were now all dead, the rivers dried up, and there being no railroads or other communications by which provisions could reach the Sertao, the inhabitants, dreading wholesale starvation, abandoned it altogether, and the whole torrent of life swept seaward.

Ceara, Parahyba, Arcaty, Baturite—all the towns along the coast were now alive with suffering humanity; age, youth, men, women and children, all famine stricken, coming in from the country by thousands upon thousands.

The city of Ceara, with 25,000 inhabitants of its own, received over 90,000 Sertanejos. Impossible to provide for such a host, the Cearenses did their best, but it was a sorrowful spectacle to see thousands of emaciated creatures sitting or lying on the open largos (squares) smitten with smallpox and other loathsome diseases, some lamenting their own fate, or the loss of friends others too weak or ill to complain; some wishing to die from despair, and others insane with their sufferings; a dangerous and most harrowing scene—one with few parallels in history.

### How Nurses Are Trained.

There are three great training-schools for nurses in New York city, at Bellevue, the Charity and the New York hospitals. At Bellevue nine wards of the hospital are assigned to the use of the school. The course of training is a thorough one. Besides bedside instruction from the house staff and lectures from the surgeons and physicians on points connected with the care of the sick, lessons in bandaging and the cooking of invalid fare are given, and constant practice in the nursing of surgical and medical cases is kept up. The board, lodging and washing of nurses are provided. Two years is the term of service, the first being devoted to training and the second to practical nursing, either as head nurses or as attendants to private cases outside the hospital. Ten dollars a month is paid the first and sixteen dollars the second year. The charges for outside nursing go to the hospital, which is always ready to furnish private invalids with nurses on reasonable terms.

The Charity hospital school is under the authority of the commissioners of charities and correction. The instruction is in special forms of medical and surgical nursing, the term of tuition the same as that at Bellevue, and the pay ten to fifteen dollars a month, with board and washing. Pupils must be over twenty and under thirty-five years old and must present with their applications for instruction certificates of moral and physical soundness from a responsible citizen and a doctor. Services in the wards of the hospital and the lying-in wards of the Maternity hospital, and lectures on the various branches of nursing, form the curriculum. Frequent examinations are held by the chief of staff of Charity hospital. At the expiration of the two years diplomas are given to those qualified.

The same course of practical instruction, extending over the same length of time, is given at the New York hospital. There are, too, elementary lessons in anatomy, physiology and hygiene. One month of each year may be spent in the kitchen and one in the laundry. The instruction in the kitchen consists of plain cooking and all the varieties of special diet, from gruels up. That in the laundry comprises plain and fancy washing and ironing. Competent chiefs in each department act as tutors. At the end of the first year a second class is formed, and the nurses of the first class become heads of the wards for next year. An examination and diploma end the term. The classes are limited to twelve students each, of from twenty to thirty years old, in good health and with a fair English education. Certificates of character are also in rule. Applications of admission to the New York hospital school are made to the board. The lady superintendent has charge of that department for Bellevue, and chief of staff of the Charity hospital passes on applicants fort hat course, whom, on approval, he turns over to the board of commissioners for final endorsement. Medical men speak in the highest terms of these schools and their system of instructions, and they are said to have done incalculable good in raising what was up to a few years ago a mere trade to the level of an honorable and useful business, or rather profession.

### Then and Now.

Owing partly to the improvement in tools and shop appliances, and partly to the system of subdivision of labor, there is no parallel by which the workingman of to-day can be gauged or compared with the workmen of thirty or forty years ago. Then the apprentice was taught—crudely, perhaps, but still taught—all the mysteries of his calling, from the preparation of the crude material to the finish of the completed result. The carpenter hewed his timber from the tree trunk or limb by means of chalk line and broadax. He bored, and mortised, and cut tenons, erected the frame of the building, boarded and shingled, and clapboarded and lathed. The blacksmith shod horses and oxen, tired wheels, made bolts and nuts, chipped and filed and drilled, forged and tempered axes and chisels, and performed numberless jobs of a variety of forms and for a variety of purposes. The machinist sometimes made his own patterns and often his own tools, worked at the vise and the plainer, the lathe and the forge, and was ready to undertake any job, from repairing a broken stove to building an engine.

The Boston *Journal of Commerce* remembers when the above practice was universal. Now timber is sawed and not hewed; mortises and tenons are machine cut; houses are built by the shinglers, the lathers, and the joiners, as well as by the carpenters; and the doors, windows, window and door frames and sashes are factory built. The horseshoer does nothing else. The forger of steel seldom works in iron. The tool maker is nothing but a tool maker. The machinist is a bench man, a lathe man, a planer, a fitter, or he has a specialty in cotton machinery or woolen, or never works but on steam machinery.

## THE SALVATION ARMY.

**Its Origin—Its Method of Work—What It Has Done.**

Persons who have had access to the English journals during the past two or three years, have been frequently struck with the graphic descriptions given of the doings and progress of a queer religious organization known as the "Salvation Army." Now that a detachment of the army has come into our midst, with ways and methods of work so sharply in contrast with our own modes of evangelical work, and as they are likely to be an object of increasing interest for at least some time to come, it may not be amiss to give the readers of the *Evening Mail* a brief history of the origin of this singular organization, with some account of what it has already done, and what it proposes to do in connection with its visit to this country.

The founder of the organization and the present head of it, or generalissimo, is Rev. William Booth, an ex-Wesleyan Methodist clergyman, of London, England. He is a man of rare tenderness and sensibility of heart, and was deeply moved for the degraded and criminal classes which crowd some parts of the city, and whom it seemed impossible to reach through any of the ordinary methods of the church. So deep was his interest in these wretched classes, and such his determination to do something for their salvation, that he requested the conference to make this a special work, and assign him to the charge of it. This, however, the conference declined to do, and assigned him instead to a country charge. With his whole soul absorbed with this one idea the result may be easily anticipated. He withdrew from the conference, and, alone and unaided, took up the work upon which his heart was set. He went among the lowest slums, he visited freely the vilest dens, and to the most wretched and degraded refuse of humanity—so steeped in vice and crime that all semblance of humanity seemed to have faded out of them—he freely offered the salvation of Christ to all who would accept it. The vile, the criminal, the besotted in sin and wretched, the refuse of the alleys and dens heard with astonishment, for the first time in their miserable lives, words of sympathy and kindness. They could hardly trust their ears as this new language fell upon them. They crowded around him by hundreds and thousands, and followed him wherever he went. Nor was it the "bread of life" alone that he gave them; like the Divine Master who, nearly nineteen hundred years ago, went about doing good to the bodies and souls of men, so he dispensed also, when it was needed, the bread that perisheth. The result was that in a short time hundreds were converted.

It now became the great question how to secure these converts and utilize them in the further advancement of his great work. It would be of no use to bring into operation the ordinary church machinery in their case. It would not hold them a single day. They were a "peculiar people," had led peculiar lives, and had peculiar modes of thought. Their lives had been different from the lives of other men and women. Their very modes of life had made them sensational and prone to the extravagant, the startling and the out-of-the-way, and so it was necessary in their case that some extraordinary and novel method should be devised to enlist and hold them. It is easy to see how to a mind and temperament like that of Booth, who, in the course of his work had many a hard fight with the archadversary, and whose mind was full of the militant figures of the Scriptures, the idea of a military organization, or a fighting Christian army should suggest itself; and so gradually the organization grew into the Salvation Army with its battalions, detachments, list processions and banners and music, its captains and companies, its orders and proclamations, and all the attractive et ceteras so calculated by their very novelty to draw the attention of those to whom all ordinary attractions had become blase. The success of Dr. Booth's organization is evidenced by the fact that the Salvation Army now consists of 125 corps and stations with 179 officers wholly employed in its labor, while privates are numbered by tens of thousands. Its headquarters are in the east of London, in Whitechapel street, consisting of a large building containing a large hall for public meetings and smaller halls for business purposes connected with the work. Nearly the organization has spread and extended over all the principal cities and larger towns of England, Ireland and Scotland, and it has the hearty support to many wealthy and influential persons both in and out of the church, who freely advance the funds necessary for the prosecution of the work.

It is claimed that through the agency of the Salvation Army the character of the whole population of South Wales has been changed for the better, that the charge sheets of police courts have been greatly reduced, the liquor traffic almost suspended, and whole counties roused to spiritual concern. The same good results have been claimed for it in the principal towns of Great Britain in which it has operated, and, it must be confessed, to a considerable degree of truth. At any rate, there is one great lesson being taught the church, and Christian philanthropists generally, in the rise and success of the Salvation Army, and that is, if the lower classes are ever reclaimed and brought to Christ, it must be by going down to them with the gospel. The angel must step down into the pool before the waters can be troubled. And another truth taught is, that even the lowest and vilest can thus be reached; that they thirst for human sympathy, long for something better, and are ready eagerly to accept it when honestly offered and in the right way.—*New York Evening Mail.*

### A Wasp of Brains.

Ever since I was a little boy I have frequently noticed that the nests of mud wasps when broken in upon, would shell out a lot of dissected spiders and other like insects in smaller proportion. I had always supposed that even so formidable an insect as a wasp would hardly want anything to do with a good, full-grown spider, for I knew enough of the combativeness of the latter to presume that he would not meekly submit to the sacrifice of his progeny to satisfy the appetite of a wasp. But one day I saw a little demonstration which made the whole thing very clear to me. You know of the careful manner in which the spider builds and incloses the nest in which his young are brought forth and reared? Well, I was observing one of these nests one morning, when I saw a mud wasp come buzzing along and alight within an inch or two of it, on the side opposite the opening. After all was quiet he proceeded with his little game of strategy.

Creeping noiselessly around toward the opening or entrance to the nest, he stopped a little short of it, and for a moment remained perfectly quiet. Then reaching out one of his antennæ, he wriggled it before the opening and withdrew it. This overture had the desired effect, for the boss of the nest, as large as one ordinarily sees, came out to see what was wrong and to set it to rights. No sooner had the spider emerged to that point when he was at the worst disadvantage than the wasp, with a movement quicker than a wink, swung the rear portion of his body around and thrust his sting through the body of his foe, killing him easily and almost instantly. The experiment was repeated on the part of the wasp, and when there was no response from the inside he became satisfied, probably, that he held the fort. At all events, he proceeded to enter the nest and slaughter the young spiders, which were afterward lugged off one at a time.

You see this accounts fully for the spider linings which we always see in the nests of mud wasps, and makes it all as clear as if that particular wasp had told me beforehand just what he proposed by his strategy to accomplish. Now it is just such demonstrations as this which must convince us of the intelligence of the lower animals, differing only in degree and development from the intelligence of man. Of course, much of this goes beyond my comprehension, but I understand more about it now than ever before, for I have taken pleasure in observing and studying not only the habits of fish, but of many other creatures inferior to man, which are popularly supposed to be governed in their actions by instinct.—*Seth Green, in the Rochester Democrat.*

A paper in Caldwell, Ohio, runs its Campbell press with the gearing of a threshing machine, the power being furnished by a horse. Its contemporaries call it a one-horse concern.

### Why Young Children Read Trash.

Mr. Charles Dudley Warner discussing the question of children's reading in the *Christian Union* calls attention to the comparatively small number of persons, even in this country, who read. "We boast," he says, "about the circulation of our newspapers. The best of them are daily marvels of news, of information, of miscellaneous reading, of entertainment of all sorts. They are the cheapest things manufactured in modern days. Considering the capital in brains, industry and money put into every number, they are at their price the wonder of our civilization. And yet the most wonderful thing about them to me is the smallness of their circulation compared to the population. Take such a center as New York, with a compact population of nearly two millions, and radiating lines of quick distribution that enable the newspapers within a few hours to reach millions more, and set against this the actual circulation of the three or four commanding journals. It is a mere bagatelle.

"Still there are many newspapers, and a large proportion of the population sees one every day—that is, of the city population; but the number of people who master the contents of a daily newspaper is not large. Readers pick out of them the items of business or amusement or politics that interest them. And it is hardly fair to credit our people with the habit of reading because they glance at the daily newspapers, or because in the country they are in the habit of spreading the weekly news for the benefit of their flies to keep the flies from disturbing their Sunday nap. I believe that the majority of business men read a book very rarely; the majority of young men in business and in society I fancy read little—they do not give their evenings to reading, and are not apt to take up a book unless it becomes the talk of society. People who spend a great deal of money on dress, on dinners, on amusements, would think it extravagant to buy a book, and if one is commended to them they will wait till they can borrow it or get it from the library. They do not hesitate two minutes about an ordinary two-dollar dinner, but they will wait months to borrow a fifty-cent book."

He concludes that "one of the reasons why the young who read at all read nothing but trash, as they are said to do, is because their parents, or older persons about them, either have not the habit of reading or they also read trash. In such households as I have described, where the elders go about declaring that there is nothing to read, the children catch the tone and think there is nothing to read—that is, nothing except the latest story-book or the picture-paper. In a lower strata of society, where the mother has neither time nor inclination to read anything, and the father pores over little else than the political journal that his son should take the *Boy's Own* story-paper about ruffians and burglars. The short of it is that the children in this country follow their elders. And I suspect that the vast majority of people care little for reading, except as it furnishes them a smattering of news or gives them a temporary excitement."

### Fire and Water-proof Paper.

A paper which experiments have shown to be thoroughly fireproof has recently been brought out, and, with the use of an ink, which is also held to be defiant to the element, the public will soon be able to feel that important document, in case of fire, are to be secure against their most dangerous enemy. Asbestos, borax and alumf are among the ingredients of the paper, which is followed by a bath of gum shellac dissolved in alcohol, or other suitable solvent of that gum, which imparts to the paper a thorough waterproof quality. The salamander ink for this peculiarly fireproof paper is said to be used for either printing or writing.

Waterproof paper is no novelty, for it has been for many years used in the manufacture of small race-boats and kindred craft. Recently, however, it has also been used as a coating on iron ships, to prevent fouling under water. While this covering is several hundred per cent. cheaper than wood or copper, it is claimed to be far superior in every respect.

But why go on? Paper, as has been said, is full of possibilities and probabilities. Who can doubt but inventive genius will continually discover in it latent capabilities that will yet be utilized in the making of numerous useful articles now unknown, or at present of infinitely more expensive materials? Out of the invisible sky of imagination has come many a valuable discovery and invention. A bold spirit of conjecture has more than once transmitted fancy after fancy into fact. Ever and again, under the magical touch of genius, the possible becomes the actual. In this sphere of paper lies a great province of rational research, in the realm of the possibilities of its future uses, in a continually widening arena of investigation. It is too much to expect that a vast deal is yet to be revealed in the interest of this beneficent article of paper, which so largely contributes to the enjoyment and convenience of the whole human race. If anything, this incidental upward tendency of prices will be commonly should stimulate rather than retard the genius of the world's inventions. With the inspiring growth and achievements of the past, we can safely leave the empire of the future to the occupancy of a reverent and unquestioning faith.—*Boston Herald.*

### Flat-Boat Life on the Ohio.

During the past winter there were from thirty to fifty families, comprising about one hundred persons, residing in what are known as "family boats," at Cincinnati. These dwellings are flat-boats, which, having served their original design as freight-carriers, or, mayhap, trading boats, have been purchased at a low price, and after being covered in have become the homes of a people; occasionally they are floating still, but generally they are to be found where the high water has left them, here and there on the river bank. A tour among these unique residences develops much that is interesting. A family boat, at its best, is by no means a comfortless dwelling. At its best it is high and dry, "shored up," so as to be level, as a tight roof, and is divided into two rooms, lighted by half-windows. Of course it is warm, for the shore is strewn with driftwood; and to be the possessor of a good axe is a guarantee of comfort from a good fire. But a good boat is not the rule, and the heavy rains, or a freshet in the river, finds them but poor substitutes for homes.

There is scarcely a family without at least three children. They are all from other parts. Several are from far up the river, one or two from West Virginia, a number from Kentucky, while several have chosen this mode of living because it is economical, "no rent to pay," and in summer time far preferable to back rooms in tenement houses. Sometimes a family in Pennsylvania, intending to emigrate, will purchase a boat, place in it their household goods, and start down the river. Whatever their original destination, they may "beach" the boat and stay from six months to three years at some point between Pittsburg and Louisville.

As a rule, the boats are merely places of residence. Occasionally a boat devoted to the bone business touches the shore. When this is the case, it is usually accompanied by a second craft for the use of the family—a home among the bones picked up along the shores of the river not being considered favorable to digestion.

In all these clusters of family boats there is the "Sunday-school boat," in which sermons are preached and religious instruction imparted on the Sabbath, under the auspices of some mission at the place of location.

### Beavers Coasting.

One of my friends in Iowa sends word that when her brother—now a general in the United States army—was a boy, he was very fond of hunting, and a great favorite with the grown-up hunters. One of these took him on a bright moonlight night in winter to see a strange sight.

The pair crept through the cold, clear air to the home of some beavers. At the dam which the beavers had built, the moon was reflected from the ice with a great glare, and, in this light, the lookers-on saw the beavers have a splendid game of coasting down a long slide, from the top of the dam to the ice covered stream below. The old beavers gave the young ones rides on their broad, flat tails; all slid down as gravely as judges, and then climbed up to have another. They kept it up until one of the watchers sneezed. At this, the beaver sentinels sounded the alarm, and then all was still—excepting that the lookers-on went away laughing heartily at what they had seen.—*St. Nicholas.*

## FOR THE FAIR SEX.

**Fashion Notes.**

Amethyst beads are substituted for jet on purple silks.

Yellow will be much worn through out the summer.

Wraps matching the dress will not be worn this season.

Blackberry buttons of fine jet are worn with black dresses.

The rose will be the favorite artificial flower this summer.

Striped borders are used with the dark blue navy linens.

White net spotted with gold will be shown for veils this summer.

Stitching, cords and tassels or rows of braid are used to trim dresses.

Black cashmere embroidered with fine dots is made up with plain cashmere.

Some of the new coat waists have the fronts prolonged to the foot of the skirt.

Large, wide scarfs of Spanish lace are substituted for the old-fashioned lace shawl.

Hortense net is a new kind of yellowish, Spanish blonde, and is used for veilings.

Heliotrope color will be used for pipings this year, as well as blue, red and old gold.

Diamond buttons worth $2,000 fastened a gown worn at a Parisian ball the other day.

Real India pongee will be worn for overdresses this summer by those who can afford it.

Deep bead fringes arranged to form a kind of epaulette, are worn with some sleeveless waists.

Many of the new sets of jewelry are chased so that the different pieces look like bits of brocade.

Black silk outside garments will be less fashionable than those of black cashmere this year.

The round enameled brooches that have been out of fashion any time this ten years are worn for bonnet pins.

Scarfs of dotted net, fastened with knots of roses, are until instead of hoods by Parisian girls returning from concerts.

India muslin, with figures button-hole stitched upon it, will be a fashionable material for dresses this summer.

Nearly all collarettes have standing rows of lace at the throat. Those which have not should be worn low on the shoulders.

Wreaths of cup moss in crimson silk are seen on some of the new hats. Small white wood flowers are so arranged as to fall in a fringe beneath the moss.

Short round skirts seem to be accepted as correct for walking dresses this summer. Those made without flounces and slightly gathered are the newest, but they are not pretty.

Handkerchief dresses are made up with plaited waists, the border being so disposed as to form a belt, and they have overskirts looped high on the left side and short underskirts.

New polonaises have the skirt sewed on at the waist line, except in the back breadths, which are left uncut and are slightly draped. The fronts are buttoned from the throat to the hem.

### Notes for the Farm.

If you are troubled about the grain chest with mice, watch for their holes and scatter a little copperas in them. A few grains will drive them away.

If your horse is troubled with scratches mix up a little saltpeter and lard and put upon the sore part, renewed daily until cured. Keep clean by using castile soap.

Professor Dana says a cow will make about seventy pounds of manure a day, or twelve tons a year. This includes both solid and liquid, and is worth from $1 to $3 a ton.

It is generally conceded that sweet corn makes the most and best relished fodder for cows. The first seed costs more, but nothing in proportion to the benefit to the dairy.

The dairy stands in need of nothing more than a mechanical milking machine. It would reduce the expenses of dairying nearly one-half, and take from it the excess of worry and care that now burdens it. Ten cows to the milker is now the rule, that being as many as the average man can thoroughly milk in an hour. The great loss to the dairy is want of profitable work for these men between milking, as two men can feed as many cows as ten men can milk.—*Land and Home.*

If there is any truth in the following it is important: A statement comes from South America that a singular property of tomato leaves has been discovered by a fruit-grower. Having cut down some of his tomato vines he used them as a mulch around his peach trees. He soon discovered that the curculio, which was destroying his fruit, had abandoned the trees surrounded by the tomato vines. Following up this accidental discovery, the free use of tomato vines proved a perfect protection, not only against the curculio, but other noxious insects.

The *American Cultivator* says it may be a comparatively slow operation to milk one cow in five minutes, when in the other hand ten minutes time might be called a quick operation in milking another. Any person whose hand is at all sensitive to the touch will, if he forces the milk down to the end of the teat faster than it can escape, find the milk rushing back, meantime the cow showing the movement to be one of pain. Always milk so that the operation shall be a pleasant one to the docile animal, affording her relief in the careful emptying of a full bag of its contents. Where care and gentleness are the rule in this particular, the cow will welcome the coming of the milker as the approach of a friend.

### Where Her Bow Was.

The Boston girls are rushing into violinity in a way that is terribly suggestive of the horrors which unborn generations are to sup upon—which reminds us of an incident. At one of the evening fiddling schools, the "professor" asked one of the misses rather abruptly: "Where is your bow, Miss Rosinwell?" "Oh," she said, abstractedly, "he's waiting for me outside, I guess." And then every drop of blood rushed into her face, and when she began to practice, her violin gave vent to cries as of one undergoing torture. If it felt all the venom the young lady put into her work, the cries were all too mild in their heart-rending weirdness. She was just as mad as she could be.—*Boston Transcript.*

### Some Artists in Hair.

Twenty ladies sitting on a platform having their hair dressed by twenty skillful operators was a spectacle recently seen in London. It was styled a *soiree des coiffures*, and was witnessed by a large and delighted concourse of people. The skill, celerity and artistic knowledge displayed in perfecting some of these elaborate coiffures is said to have been marvelous. There were all kinds of fancy and historical headdresses of the time of Marie Antoinette, Louis XVI., Louis XV., and the directoire. Possibly the greatest triumph was a marvelous edifice of hair, designed to represent the billows of the ocean, on which a tiny model of a ship tossed as the wearer moved her head.

### Smuggling Opium.

A new Chinese trick has been discovered, says the San Francisco *Chronicle*. A few days since, on the arrival of a vessel from Honolulu, containing several cases of shoes that had been shipped to that port by some Chinese house in San Francisco, and sent back condemned by the consignees, the custom house officials were curious to know the cause, and this curiosity prompted them to open the cases. An ingenious plan was discovered to smuggle opium into that port through the heels of the "condemned" shoes. The heels at a glance appeared natural and properly made, but by pulling out a nail or two, and removing one thickness of leather, a hole occupying nearly the size of the heel, was found, into which opium had been placed to introduce into the Hawaiin market. The "condemned" business was a part of the programme, and the shoes were returned evidently to be reloaded and forwarded to that port.

Colonel Ingersoll says he doesn't see "how it is possible for a man to die worth $5,000,000 or $10,000,000 in a city full of want." Nor do we. Editors should club together and resolve not to die worth $5,000,000 or $10,000,000. We would rather not die at all than to leave this world worth that much money.—*Norristown Herald.*

## NEWS OF THE WORLD.

### Eastern and Middle States.

The opening ceremonies of New York's new museum in Central park, called the Metropolitan Museum of Art, took place in presence of President and Mrs. Hayes, Secretary Evarts, Peter Cooper and other prominent persons. After the delivery of several speeches the President declared the building open to the public.

Two tinsmiths while at work on the roof of the Seventh regiment armory in New York were blown from the building by a heavy gust of wind and fell sixty feet, one being instantly killed and the other sustaining probably fatal injuries.

The Tammany hall executive committee issued a call for a State convention, to be held on the same day and at the same place designated in the call of the regular New York Democratic State committee.

The American Fish Cultural association held its annual convention in New York, listened to the reading of a number of papers on subjects relating to pisciculture and banqueted on fish.

M. de Lesseps, projector of the Panama canal, has sailed from New York for Europe after a visit of several months to this country.

For the first quarter of 1880 only seventy-seven failures are reported in New York city, with total liabilities of $953,635, and assets of $292,026. For the same period last year there were 141 failures, with liabilities of $2,805,512, and assets of $959,526, while in 1878 the failures reached a total of 292, with liabilities of a round $20,000,000.

The Tucker was executed for murder in Plattsburg, N. Y., when their boat upset and three of the occupants were drowned.

A terrible fire has occurred in Montalmont, a village of Savoy. Seventeen of the inhabitants perished and thirty-one dwellings were destroyed.

By an explosion in a coal mine in Belgium forty-two miners lost their lives.

Mahmud Jan, a noted Afghan leader, has been killed in action.

A London dispatch says that Queen Victoria, upon her return from Germany, will request the Hon. William E. Gladstone to form a new government.

### CONGRESSIONAL SUMMARY.

**Senate.**

After listening to a long speech by Mr. Edmunds against the clause of the immediate deficiency bill which relates to the appointment of deputy marshals, the bill was passed by a party vote of 35 yeas to 21 nays.

Mr. Conkling introduced a bill to establish a uniform system of bankruptcy throughout the United States; also, providing for the erection of a public building at Brooklyn, N. Y., for the use of the postoffice and the United States courts and the revenue offices, and for other purposes.

On motion of Mr. Pendleton the Senate disagreed to the amendment of the House to the bill amending the census act, and a conference committee was appointed thereon.

A communication from the secretary of war was presented, showing the necessity of an additional appropriation of $265,000 to pay certificates for arrears of pay and bounty issued since January 1, 1880.

The House bill giving the consent of Congress to an agreement entered into between the States of New York and Vermont, respecting the boundary line at Fairhaven between those States, was passed.

The committee on printing reported a joint resolution providing that the employees of the government printing office be allowed holidays with pay.

**House.**

The consular and diplomatic appropriation bill was passed as originally reported by the appropriation committee by a vote of 191 yeas to 15 nays.

A mammoth petition, 183 yards long, was presented by Mr. Brewster. It bore the names of 34,000 ladies belonging to the Temperance union in the several States and Territories and the District of Columbia praying the commission to inquire into the alcholic liquor traffic and for such legislation as will prohibit the manufacture and sale of intoxicating liquors. It was referred to the special committee on the subject.

The contested election case of Bradley vs. Slemons, from Arkansas, was taken up, and the minority resolution of Mr. Weaver declaring the seat vacant was rejected by 30 to 152. The majority resolution declaring Mr. Slemons the sitting member, entitled to the seat, was adopted by 149 to 21.

Mr. Stephens presented a petition of 3,000 scientific gentlemen in various parts of the country asking for the adoption of the metric or decimal system of weights and measures. It was referred to the committee on coinage, of which Mr. Stephens is chairman.

Mr. Weaver obtained the recognition of the speaker and moved to suspend the rules and adopt the following resolution: "*Resolved*, That, it is the sense of this House that all currency (whether metallic or paper) necessary for the use and convenience of the people, shall be issued and its volume controlled by the government, and not by or through the banking corporations of the country; and when so issued it should be a full legal-tender in payment of all debts, public and private. *Resolved*, That, in the judgment of this House that portion of the interest-bearing debt of the United States which shall be redeemable in the year 1881 or prior thereto (being an amount about $782,000,000), should not be refunded beyond the power of the government to call in such obligations and pay them at any time, but should be paid as rapidly as possible and according to contract. To enable the government to meet these obligations the mints of the United States shall be operated to their full capacity in the coinage of standard silver dollars and such other coinage as the business interests of the country may require." After a short debate a vote was taken on the resolution and it was defeated by 117 ayes to 84 yeas.

Mr. Townshend moved to suspend the rules so as to discharge the committee of ways and means from the further consideration of the bill placing salt, printing type, printing paper and materials used in the manufacture of printing paper on the free list and put it on its passage. Defeated by 112 to 80—not two-thirds in the affirmative.

The cost of Dr. Bull's Cough Syrup is only 25 cents. A bottle will convince even the most incredulous of its excellence.

**In Powder Form.**

Vegetine put up in this form comes within the reach of all. By making the medicine yourself you can, from a 50c. package containing the barks, roots and herbs, make two bottles of the liquid Vegetine. Thousands will gladly avail themselves of this opportunity, who have the conveniences to make the medicine. Full directions in every package.

Vegetine in powder form is sold by all druggists and general stores. If you cannot buy it of them, enclose fifty cents in postage stamps for one package, or one dollar for two packages, and I will send it by return mail. H. R. Stevens, Boston, Mass.

**A Household Need.**

A book on the Liver, its diseases and their treatment sent free. Including treatises upon Liver Complaints, Torpid Liver, Jaundice, Biliousness, Headache, Constipation, Dyspepsia, Malaria, etc. Address Dr. Sanford, 162 Broadway, New York city, N. Y.

**The Voltaic Belt Co., Marshall, Mich.** Will send their Electro-Voltaic Belts to the afflicted upon 30 days trial. See their advertisement in this paper headed, "On 30 Days Trial."

Walking made easy with Lyon's Heel Stiffeners; they keep your boots and shoes straight.

For sore throat, gargle with Piso's Cure, mixed with a little water. Relief is instant.

Don't be without C. Gilbert's Starches.

**A CARD.**—To all who are suffering from the errors and indiscretions of youth, nervous weakness, early decay, loss of manhood, etc., I will send a Recipe that will cure you, *FREE OF CHARGE*. This great remedy was discovered by a missionary in South America. Send a self-addressed envelope to the Rev. JOSEPH T. INMAN, *Station D, New York City.*

### Foreign News.

Samuel Price and Edward Rainer, aged fourteen and fifteen, while playing in a small boat off the dock at Toronto were carried out into the lake. The boat, containing their dead bodies, was found near Niagara the next morning.

John Bright has been