

A Modern Jacob.

The Philadelphia Telegraph's Paris letter says: I was recently told by a young French gentleman (the son of the prefect of La Rochelle) one of the strangest romances of real life that ever came to my knowledge. Some four years ago a peasant boy who lived on a farm near the town of Clermont-Ferrand saw and fell in love with the beautiful daughter of a gentleman of good fortune and position, he being at that time seventeen years of age and the young lady was just sixteen. The new "Claude Melnotte" was so madly in love that he went straight to the house of the young girl's parents and demanded her hand in marriage. The father treated the preposterous proposition with good-natured scorn. "Come back when you have an income of \$40,000 (200,000 francs)," was his answer, "and then we will see about it." The infatuated youth took him at his word, and forthwith set to work. Now one of the peculiarities of the town of Clermont-Ferrand is a scarcity of water. There is no river near it, so it relies for its supply on springs and wells. Under these circumstances a spring is a valuable piece of property and commands a relatively high price. So the young peasant lover set on for an adjacent mountain, there to search for hidden springs. My informant said that he had honey-combed the whole side of the mountain with his works, constructing at one point a tunnel over two miles in length. All this was executed with his own hands. He worked from dawn to dark, lives upon potatoes of his own planting, and never spends so much as a sou upon a mug of beer. Every Sunday he goes to church in the town, after which he proceeds to the house of his lady-love, to ask if she is married or likely to be. On receiving a response in the negative he plods contentedly homeward, and starts out afresh to his toil on the morrow. This life he continues now for full ten years. Up to the present time he has discovered three important springs, each of which he sold for \$5,000, but, though now possessed of what a man in his condition of life is wealth, he abates none of the hardships of his existence. He has one idea, namely, to become the possessor of a fortune sufficient to enable him to claim the hand of the object of his blind passion. Yet no one who knows the parties ever imagines that the young lady will ever consent to marry him. She is now twenty years of age, and is pretty, refined and accomplished, while he is coarse and unlettered, without even physical comeliness, as he is short and thick-set, with a broad, stolid countenance. What will be the end of this dream, I wonder? Will he go mad or break his heart the day he finds his beloved either married or betrothed? Or will he die some day of privation and overwork, with a vision of success before his eyes.

Seasickness.

Theories about seasickness are as innumerable as remedies for it. Some persons, especially women, never get accustomed to the sea, and all efforts to prevent or cure the afflictive nausea are unavailing. One of the latest prescriptions is to take five-drop doses of nitrate of amyli, which has been known to exercise on hundreds of sufferers. But much depends, of course, on certain conditions of the system, a saving clause for all boasted forms of relief. One of the favorite theories about seasickness ascribes it to the tossing about of food in the stomach, which disturbs it and the diaphragm, nausea and vomiting being the inevitable consequence. Another theory is that the stomach has no such relation to the ailment, whose real cause is a congestion of the brain, acting reflexly on the stomach. Still another and indeed a more reasonable theory is that most cases are due in some degree to each of the sources mentioned, and that, with a full stomach and congested liver, little can be expected from amyli. In cases mainly nervous, as with women, nitrate of amyli is usually found very beneficial, and deserves more extended and extensive trial than it has hitherto received. Nearly everybody has a remedy for seasickness, and whoever has experienced relief from any form of treatment naturally has entire faith in that form. Hundreds of so-called infallible cures might be enumerated, and yet some people have tried any number of them without the least advantage. The probability is that seasickness comes from different causes with different individuals. With some it arises from the stomach; with some from the nerves; with others from the brain; with others again from the imagination. No exact diagnosis can be made of seasickness. Of forty or fifty sufferers each may be sick in a different way; and when the sickness recurs it may be a marked variation from the first sickness. The disorder depends more or less on the individual, and any attempt to generalize upon it is pretty certain to be misleading as well as futile.

Words of Wisdom.

An honest man take delight in doing good. Youth looks at the possible, agent the probable. He who declares all men knaves, convicts at least one. The rarest gems often lie hidden in kennels of impurity. Words are the daughters of the mind, but actions are the sons of the soul. Wit loses its respect with the good when seen in company with malice. He only is independent who can maintain himself by his own exertions. As a bird wandereth from her nest, so is a man that wandereth from his place. Return equity and justice for evil done to you, and pay goodness by goodness. Find earth where grows no weed, and you may find a heart wherein no error grows. Poetry is the art of substantiating shadows and of lending existence to nothing. The faith which looks forward is far richer than the experience which looks backward. There are occasions when ceremony may not be easily dispensed with, kindness never. Love, undying, solid love, whose root is virtue, can no more die than virtue itself. Many people are busy in the world gathering together a handful of thorns to sit upon. How can we look with confidence to a heaven above, when we do so little to make a heaven below, around and about us?

Miss Flynn and Her Lover.

Miss Mary Flynn was studying medicine and being courted at the same time. Mr. William Budd was attending to the latter part of the business. One evening while they were sitting together in the front parlor, Mr. Budd was thinking how he should manage to propose. Miss Flynn was explaining certain physiological facts to him. "Do you know," she said, "that thousands of persons are actually ignorant that they smell with their olfactory peduncle?" "Millions of 'em," replied Mr. Budd. "And Aunt Mary wouldn't believe me when I told her she couldn't wink without a sphincter muscle!" "How unreasonable!" "Why, a person cannot kiss without sphincter!" "Indeed?" "I know it is so!" "May I try it on you?" "Oh, Mr. Budd, it is too bad for you to make light of such a subject." Mr. Budd seized her hand and kissed it. She permitted it to remain in his grasp. "I didn't notice," he said, "whether it was a sphincter or not?—a sphincter here or there?—let me try again." Then he tried again, and while he held her hand she explained to him about the muscles of that portion of the human body. "It is remarkable how much you know about such things," said Mr. Budd—"really wonderful. Now, for example, what is the bone at the back of the head called?" "The occipital bone of course." "And what are the names of the muscles of the arm?" "The spiralis and the infra-spiralis, among others." "Well, now let me show you what I mean. When I put my infra-spiralis around your waist, so, is it your occipital bone that rests upon my shoulder-blade, in this way?" "My back hair primarily, but the occipital bone of course, afterward. But oh, Mr. Budd, suppose pa should come in and see us?" "Let him come! Who cares?" said Mr. Budd, boldly. "I think I'll exercise a sphincter again and take a kiss." "Mr. Budd, how can you?" said Miss Flynn, after he had performed the feat. "Don't call me Mr. Budd; call me Willie," he said, drawing her closer. "You accept me, don't you? I know you do, darling." "Willie," whispered Miss Flynn, faintly. "What, darling?" "I can hear your heart beat." "It beats only for you, my angel." "And it sounds to me out of order. The ventricular contraction is not uniform." "Small wonder for that when it's bursting for joy!" "You must put yourself under treatment for it. I will give you some medicine." "It's your own property, darling; do what you please with it. But somehow the sphincter operation is the one that strikes me most favorably. Let us see how it works again?" But why proceed? The old, old story was told again, and the old, old performance of the muscles of Mr. Budd's mouth enacted again. And, about eight years later, Mr. Budd was wishing that Mary would catch some fatal disease among her patients, and Mary was thinking that the best possible use Willie could be put to would be as a subject for the dissecting table.—Maz Adeler.

The Chinese Army and Navy.

Some of the Russian newspapers, in view of the contingency of a war with China, give some particulars of the military and naval forces of that country. The chief portion of the Chinese army consist of "the First Army Corps," composed of eight Manchou, eight Tartar and eight Chinese corps, and the garrison of Peking. The soldiers of "the First Army Corps" are seldom drilled, and are mostly armed with old swords, bows, spears and other antiquated weapons. Being badly paid, they earn their living by working at all sorts of trades, and are of but little use as soldiers. The total strength, exclusive of officers, is about 105,000 men. The garrison of Peking, also badly armed, consists of 17,500 men. Besides these there are two corps 16,500 strong, which form the emperor's body-guard, and a division of infantry of 20,000 men, whose duty it is to keep order in the capital and its suburbs. There is also a third army, which during the present century has been almost exclusively employed in time of war. This is the so-called "Green-banner Army," which is composed of eighteen army corps, in correspondence with the eighteen provinces of the empire. Each army corps has five divisions, and each division five camps. A general commands each division, and the civil governors are the commanders-in-chief of the troops stationed in their respective districts. The total strength of the "Green-banner Army" on paper is about 851,000 men, with 7,000 officers, but it is probable that more than one-half of this force could be brought into the field. Barely 50,000 of them are armed with European weapons and drilled according to the principles of European tactics; the remainder still carry spears, matchlocks, and short swords. Finally, there is a kind of irregular volunteer corps, which is called in when the regular army has proved incapable of suppressing an insurrection or putting down brigandage. This corps is even worse armed than the others, possesses but little training, and is hardly amenable to discipline. As for the Chinese navy, its ships are, for the most part, badly constructed and insufficiently manned. There are a few European officers, but the majority of the naval officers are Chinese, who are very ignorant and inefficient.—Fall Mail Gazette.

More Sunshine.

The world wants more sunshine in its disposition, in its business, in its charities, in its theology. For ten thousand of the aches and pains, and irritations of men and women, we recommend sunshine. It soothes better than morphine. It stimulates better than champagne. It is the best plaster for a wound. The good Samaritan poured out into the fallen traveler's gash more of this than of oil. Florence Nightingale used it on the Crimean battle-fields. Take it into all the alleys, on board all the ships, by all the sick beds. Not a phial full, not a cup full, but a soul full. It is good for spleen, for liver complaint, for neuralgia, for rheumatism, for falling fortunes or melancholy.—Path and Works.

Street Lights.

In the reign of Louis XIV., one of the most magnificent spectacles was supposed to be the general lighting of the streets of Paris. The work was invited to witness the royal scene. It was believed to be the highest achievement of modern civilization—neither the Greeks nor the Romans seem to have thought of the wonderful invention. Yet the lights of the great city consisted only of dim lanterns and torches, dispersed at distant intervals, and compared with the bright glare of modern gas, would have seemed only a dusky gloom. Whether the Greeks and Romans lighted their cities at night is still in doubt. It is probable that Rome, except in rare instances of festive illuminations, was left in darkness. Its people, when they went out at night, carried lanterns or torches, or else wandered, in moonless nights, exposed to robbers and stumblers, over obstacles. Antioch, in the fourth century, the splendid capital of the East, seems to have set the example of suspending lamps through its principal streets, or around its public buildings. Constantine ordered Constantinople to be illuminated on every Easter eve with lamps and wax candles. All Egypt was lighted up with tapers floating on vessels of oil at the feast of Isis; and Rome received Cicero, after the flight of Catiline, with a display of lanterns and torches. Yet the practice of lighting up a whole city at night seems in fact, a modern invention.

Paris and London dispute the priority of the useful custom. At the opening of the sixteenth century, when the streets of Paris were often infested with robbers and incendiaries, the inhabitants were ordered to keep lights burning, after nine in the evening, before the windows of their houses; in 1558, vases filled with pitch and other combustible matter were kept blazing at distant intervals through the streets. A short time afterward, lanterns were provided at the public cost. They were at first only employed during the winter months, and were soon kept constantly burning. Reverberating lamps were next invented, and were usually surrounded by throngs of curious Parisians. In 1777, the road between Paris and Lyons, for nearly two miles in length, was lighted; and in the present century, the French metropolis has steadily improved its street lamps, until the introduction of gas made the streets of Paris as brilliant by night as by day. Its light was never quenched until, in its recent humiliation, its glittering boulevards and sparkling parks were hidden in unwonted gloom.

London claims to have lighted its streets with lanterns as early as 1414, but the tradition seems doubtful. About 1668 the citizens were ordered to place lamps in front of their houses every night during the winter; but as late as 1736 the rule was imperfectly obeyed. Robbers filled its narrow streets, and life and property were never secure in the darkness. Gas lamps were next introduced, at the public expense; the number was rapidly increased, and toward the close of the last century the citizens of London were accustomed to boast of their magnificent system of street-lamps, which far surpassed that of Paris. The roads running from the city for seven or eight miles were lined with crystal lamps. At the crossing of several of them the effect was thought magnificent; and what would now be a dim and dismal array of smoking lights, seemed then one of the wonders of the time. Novelists and poets celebrated the nightly illumination of the overgrown capital. Vienna, Berlin, and other European cities followed the example of Paris or London, and New York and Philadelphia early adopted the custom. Rome, once, still clinging to the usages of the middle ages, refused to light its streets; the popes steadily opposed the heretical invention, and preferred darkness to light. At length came a wonderful advance. For three centuries civilization had prided itself upon its lamps or lanterns; it was now to shine in novel brilliancy. The Chinese, who seem to have originated without perfecting most modern inventions, had long been accustomed to sink tubes into beds of coal, and carry its natural gas into their houses, and even their streets, for the purpose of illumination. They also used it for manufactures and cooking. But they had never discovered the art of making gas. In 1792, Mr. William Murdoch first used gas for lighting his offices and houses in Glasgow, Cornwall, and Birmingham manufacturers at once adopted the invention. The unparalleled splendor of the light at once attracted public attention. The peace of 1802, transitory as a sudden illumination, was celebrated by the lighting of the factory of Watts and Boulton, at Birmingham, with a flame that seemed to rival the brightness of the stars. The invention spread over the world. London, ashamed of its once boasted array of endless lamps, now glittered with hundreds of miles of gaslights. Paris again called the whole world to witness its tasteful illumination. The cities of the new world lighted up every corner of their busy streets. Even Rome yielded to the useful invention.

Fish Culture.

Norway leads the world in her fisheries, with an annual production valued at \$13,000,000, and yet we have opportunities for expanding to a limit even surpassing these enormous figures. The artificial propagation of fish has been attended with encouraging results, first in Germany, then in France, and latterly in the United States, having become one of our most important industries. The United States fish commissioner says: "Norway is the only European nation that has a scientific commission occupied officially in the supervision of the fisheries and in devising methods by which they may be carried on and extended with the least possible waste. To the labors and observation of such men as Dr. Boeck, Professor Sars and others, is due much of the present efficiency of the Norwegian fisheries." In 1867 we imported about as much fish as we exported. If we devoted sufficient energy to the business we could export one hundred times as much, and need import none at all. Fish culture is in its infancy. Its resources are immeasurable. It may approximate and even rival agriculture in importance. Its development will give employment to large numbers of men and bring food within the means of the poor as well as of the rich. The propriety and utility of international exhibitions, like that now in contemplation at Berlin, where the representatives of our nation can learn the nature of the products of the others, as well as show its own in a universal market, can no longer be questioned.—Scientific American.

Condensed History of Music.

Music as a science may be said to have been cradled with the Christian era, for while men have sung with the birds from time immemorial, and played on rude instruments as far back as any history takes us, just as David did, when he said: "I will sing unto the Lord a new song, and praise him upon psaltery and harp." I was amused at an arrangement gotten up last year by a Chicago party ostensibly to make music simple, ignoring notes, laws and all of our musical characters except the bare letters for each sound, and claimed in this way to be teaching thorough-bass. He simply retrograded to the time of St. Ambrose, 1500 years ago. Any skilled musician will see the ludicrousness of trying to express thorough-bass, which is the science of figured harmony, by any letter. In the sixth century, St. Gregory did the next active work, but regarded from our standpoint he did little of value more than write the Gregorian chants, some of which are in use to-day by the Catholic churches, with many changes. He introduced one line, where we now have five, around which to arrange the musical characters. Singers had to do some tall guessing in those days. There was no harmony, or no time thought of, as yet.

In the tenth century Hughald began to evolve some valuable thoughts on harmony, which, though very faulty, was a splendid step in the right direction. In looking over a transcript of his work I found it full of errors that no modern composer would dare to make, such as the doubled thirds, consecutive fifths, and consecutive octaves, etc., all of which, the good monk says, were very pleasing to the ear. In the eleventh century an Italian monk named Guido invented our present syllables, which are invaluable for vocal music. These were the first syllables of some old Italian verses. He also improved largely on notation.

In the thirteenth century Franco de Colono conceived the first "time" the idea of expressing time by the shape or form of the notes. On this we have since made no special improvement. In the sixteenth century, 1502, one Petrucci invented the casting of metal music type. This was sixty years after the art of printing books, etc., was discovered (1442) and twenty years after the first Bible was printed, in 1478. There has been a magnificent progress in all musical instruments. Mentally I am taken back to the rude tom-tom of long ago—a round hoop, with a couple of gut strings, making about as music as a salt box would. Some of the savages cling to this tom-tom yet. They have a legend like this: An angel in heaven was sitting on the clouds playing on the tom-tom, and so entranced was he with his music, that he forgot himself and dropped it—I think I should have dropped it myself if I had to play it—when a savage found it, and has used the heavenly pattern ever since.

In the fourteenth century our organs began to assume valuable shape. The pianoforte was invented about 1650. In about 1717, at London, a great crowd went to a concert to hear a wonderful instrument called the pianoforte, so says a clipping which I came across a short time since. We get some splendid conceptions of musical advancement when we contrast the tom-tom with our matchless grand pianos of to-day, or with our mighty pipe organs, whose magnetic and powerful voices cause us involuntarily to remove our hats and bow our heads, lifting us by their influence almost into the presence of the infinite.—Prof. S. G. Rice.

Bits of Information.

In the manufacture of tobacco, molasses, licorice, paste a decoction of figs and glycerine are used to impart a sweet taste. Common salt and other salts are used for flavoring, and nitrate of potash or soda is added to increase its combustibility. Anise and other aromatics are added for their flavor, and smoking tobacco has its odor, if not its taste, improved by the introduction of cascarrilla bark. Cabbage and other leaves are often used to adulterate chewing tobacco.

In cold weather, horses which have been driven rapidly, or have become heated from exertion, throw off great quantities of steam or vapor. The reason of this is that the heat thrown off from the body on coming in contact with the colder air is condensed in the form of vapor. The principle is the same as that which causes the windows of a close room to become covered with ice on a cold day in winter. The warm air of the room becomes condensed on the cold glass, and it is congested in the form of ice. Previous to the time of Queen Elizabeth's stairs were all constructed on a circular plan, and were called turret or corkscrew stairs. During the sixteenth and seventeenth centuries staircases with wide, straight flights were first introduced, and were made the leading feature in mansions of the Elizabethan style. They had usually massive oak balusters with carved panels and pendants. Staircases of this description are still in common use, but are lighter in style, light cast-iron being used instead of oak balusters.

Skirting a School of Icebergs.

Captain Wm. Smith, of the steamship State of Georgia, that arrived in New York from Glasgow, reports passing a large school of icebergs southeast of Newfoundland. First Officer A. B. Murray, who was on watch at the time, said: It was a beautiful day. There were eight large icebergs and a number of smaller ones. They extended east and west, and were drifting southward. We passed within a mile, and had a good view of them as we passed one after another for three hours. They were in sight from 100 feet to 800 feet high. One that was in the shape of a high bluff was about 800 feet long. Another was about 350 feet long, and was surmounted with towers, spires and turrets, like a vast cathedral. Another was 300 feet long and was wedge-shaped. The colors were gorgeous in the afternoon sunshine. Some of the icebergs had a clear blue streak all the way around, but the ice was mainly clear. Our course led us very near, but we were not obliged to deviate. If we had met such a mass of ice at night it would have been very dangerous, but with a sharp lookout, unless the weather is foggy, icebergs may be plainly seen at night from the halo of light that generally surrounds them. The shape of an iceberg always changes as it is viewed from different points, and a lively imagination can liken one to many objects. If we could have towed the largest one into New York it would have materially affected the price of ice this summer.

FARM, GARDEN AND HOUSEHOLD.

Some of our readers may think this a contradiction, but it is quite possible to grow pork with that happy medium of fat and lean so much relished. The greatest obstacle to it is the general method adopted in feeding pigs. They are fed on food merely adapted to lay on fat, and with a scant proportion of albuminoids to grow the muscles or lean meat. Pigs have thus been grown and fattened for so long a time that they seem to have taken on only lean meat enough to hold the body together. Except when on grass, the pig is plied almost wholly with corn, which is excessively rich in starch and fat. Some breeds have become so constituted that they will fat on grass. The pig in its natural state, does not get excessively fat, but is nearly as lean as a beef animal. If young pigs are fed on nitrogenous food, such as skimmed milk and grass, they will be found to grow rapidly—extend the frame and muscular system, having only fat enough to round out the body to comely shape. Pigs should always be fed fat; but this does not necessarily mean cramming with corn, which merely piles on the fat till the young pig becomes diseased. It is this mode of feeding for so many hundred generations that has transformed our swine into lumps of fat with a few strings of muscle to tie the ball together. To reverse this work of improper feeding will take some time, but it can and must be done. Witness the great change from those overgrown fat hogs which were bragged of years ago, but are now seldom seen, because the market does not call for them. We do not undervalue corn which is the best fattening food the American farmer possesses; but we should be glad to have them avoid its free use in feeding pigs, and substitute a more nitrogenous food, such as oats, wheat, bran or middlings, a little oil meal, decorticated cotton-seed meal, rye, bran or barley—any of these. Corn may be fed sparingly with clover or skimmed milk. Our Canadian neighbors can raise fat and lean pork with grass, peas, barley and corn. We must have a grass diet for pigs generally, and with this grain may be fed. Farmers sometimes forget that the pig is a grating animal as much as the horse, and needs fibrous food to keep him healthy. Nicely cured clover is relished by pigs in winter, especially when raised on grass. If you want fat and lean pork, a strictly corn diet must be reserved to the last stage of feeding, simply to harden the pork; yet a little corn may be fed all through the life of the pig, only giving these other nitrogenous foods with it. Pork grown in this way is relished by most people, and will always find a ready local market.

No more important question than the above has ever been discussed in our columns. At one time hard was the most valuable of all the hog product; but it has ceased to possess exceptional value, and now the desideratum in pork production is to bring about a good development of flesh.—Home Weekly.

Household Hints.

New linen may be embroidered more easily by rubbing it over with fine white soap; it prevents the thread from cracking. To remove grease from wall-paper lay several folds of blotting-paper on the spot and hold a hot iron near it until the grease is absorbed. To clean brass, immerse or wash it several times in sour milk or whey. This will brighten it without scouring. It may then be scoured with a woollen cloth dipped in ashes. To take ink out of linen, dip the ink spot in pure melted tallow, then wash out the tallow and the ink will come out with it. This is said to be unfailing. If brooms are wet in boiling sudsy once a week they will become very tough, will not cut a carpet, will last much longer and always sweep like a new broom. To remove rust from a stove-pipe, rub it with limesoil (a little goes a good way); build a slow fire at first till it is dry. Oil in the spring to prevent it from rusting.

Celery and Its Cultivation.

No vegetable improves more on acquaintance than celery. Farmers object to its cultivation on the ground that there is too much labor about it, and this was a serious objection when the fashion was to cultivate it in trenches; but it is found that a plow makes all the trench requisite for the dwarf and medium varieties, which are really more crisp, solid, and better flavored than the giant. "Boston market celery" can be grown with little more labor than a crop of cabbages, and as it adorns the table, tickles the palate, and tones the stomach, it deserves a wider cultivation by farmers than it has secured.

The Great English Landholders.

The thirty-five largest landed proprietors in Great Britain hold each the following amount of land out of the 74,000,000 acres which make up the United Kingdom:

	Acres.
Duke of Argyll	175,114
Baillie of Doehorn	165,648
Borlase of Glendon, Galway	170,517
Earl of Breckinridge	438,358
The Duke of Buccleuch	459,103
Marquis of Bute	326,500
Camero of Lochiel	126,008
The Chisholm	113,256
Marquis of Conyngham	166,710
Earl of Dalhousie	138,021
Duke of Devonshire	198,665
Marquis of Downshire	120,180
Parquharson of Invercauld	109,551
Earl of Fife	249,220
Earl of Pittwater	115,743
Gordon of Cluny	112,354
Duke of Hamilton	157,386
Earl of Home	106,550
Earl of Kenmore	118,006
Marquis of Lansdowne	142,916
Earl of Leonsfeld	109,985
Lord Macdonald	132,419
The Macintosh	124,151
The Macleod	141,679
Matheson of Ardross	220,663
Matheson of Stornoway	424,660
Duke of Northumberland	186,397
Duke of Portland	116,668
Sir John Ramsden	162,235
Sir Charles Ross	358,500
Earl of Seafield	305,930
Marquis of Sligo	114,831
Earl of Stair	116,370
Duke of Sutherland	1,388,646
Sir W. W. Wyke	145,777
Total acres, say	7,350,622

At Bowling Green, Ky., Jesse Thomas lost nine good hogs. Just six days thereafter he found them. The ground where the beds were had suddenly sunk and they were entombed fifteen feet below the surface.

"Made of Paper."

We have so long cherished a well-founded prejudice against paper as being a flimsy and unsubstantial substance that we are surprised at its recent utilization in many ways where strength and durability are the important requisites. Many articles, if we learned that they were made entirely or in part from paper, immediately lost favor in our eyes, and we looked at them askance. When the soles of our shoes soon wore out the fact was often attributable to the use, by the unscrupulous maker, of shoddy strips of paper in the place of inside layers of durable leather, and this is only a single illustration on among many that might be given to show to what miserable, if not despicable, uses paper has been put. The daily tearing of newspapers and light wrapping paper for the purpose of doing up parcels has also done much to impress us with the fragility of the frequently handled material. It was natural that we had come to regard paper as a cheap and unreliable substance.

As a consequence, we cannot readily conceive of the successful application of paper where great strength, tenacity to withstand powerful strains and durability are required of it. But the process of compression, enormous in its power, gives all these highly desirable constituents to a solid, compact substance, which, although harder than wood and taking to some extent the place of iron, is formed of the same material that makes the fragile newspaper sheet. Paper car wheels are successfully manufactured and used, paper bricks are becoming desirable as a building material. Professor Green, of the Troy Polytechnic institution, has erected a great revolving dome whose light frame work is covered with hard, enduring paper-mache only one-sixth of an inch thick. Paper has been successfully employed as an anti-fouling sheathing for an iron vessel and in other things almost as unexpected.

It must be observed in connection with paper, however employed, that it possesses two very manifest advantages—lightness and cheapness—and when compressed into a solid substance it is also as hard and durable as several other strong and more costly materials. No one will hesitate to employ paper instead of iron in any construction provided that the former can be shown to be sufficiently strong, for its lightness and cheapness are most important considerations in its favor. The range and mutability of paper are remarkable. The same material that forms the delicate valentine enters into the composition of the staid cart wheel that sustains the weight of tons and endures constant friction as it glides along the iron rails. According as paper may be prepared, it ranks among the most fragile or the stoutest substances.

Harder than wood and impervious to water. Just think of it. How people fifty years ago would have been surprised at such accomplishments. But being established facts, they are fraught with great significance. They have enlarged the possibilities of paper wonderfully. They have opened a wide field for experiment and invention. Papers destined to take the place of many substances that will be found inferior to it, while its application in numerous undeveloped ways, wherein nothing else can be used, may confidently be expected.—Paper World.

"Strong Jamie."

The Berwickshire journals in 1844, gave much information concerning this remarkable man. Though short of stature, he possessed prodigious strength, which earned for him the familiar cognomen of "Jamie Strang," or "Strong Jamie." A writer in the Berwick Advertiser said: "We have heard him state that the greatest weight he ever lifted from the ground was 165 stone, and that he had lifted eighty-five stone with one hand. When the Forfarshire militia were encamped at Eyemouth, he went to see an acquaintance among them. While there, a dancing-master, who upon the soldiers' knowing Stuart, engaged to provide a drummer who would lift more than the booster could. Stuart, dressed as a drummer, was brought in. A piece of ordnance was lying before them which the dancing-master raised to the perpendicular, and then allowed to fall. He asked the drummer whether he could do that. Stuart pretended that he was not very sure that he could; but placing his arms round the cannon, he raised it entirely from the ground, and carried it to some distance. At another time, when at Velvet Hall, near Berwick, some countrymen were laboring to get a cart laden with hay out of a miry hole into which by some accident it had sunk. Stuart was appealed to for assistance. He desired them all to stand aside, and, going underneath the cart, removed it with his load to the opposite side of the road." This extraordinary man (it is averred in many quarters) actually went fiddling about the country till nearly 114 years old. A small sum was then collected for him, toward which the queen and the late Sir Robert Peel contributed. Stuart declared that he "hadna been see weel off this hundred year." At length his career closed. He died at Tweedmouth on the eleventh of April, 1844, and was buried on the fourteenth in the presence of a vast concourse of spectators. The Berwick Advertiser, a few days afterward, contained an advertisement relating to statutes of the veteran.—Chambers Journal.

Balky Horses.

Among the suggestions said to be published by some anti-cruelty to animals society are these: If the horse when he balks can have his attention diverted there is usually no trouble in starting him. This may be done in various ways, of which the following are a few that have been employed: Take the horse out of the shafts and turn him around a little. This will make him entirely dizzy and lead him to forget that he does not wish to draw the load. A stout twist around the forehead has been used as a remedy with good results. A string tied around the ear has the same effect. We have seen horses of the balkiest sort started in a moment by putting a lump of earth into their mouths. Even a piece of sugar or a handful of fresh grass will so divert the attention of a balkier that he will often start off without trouble. Some mild treatment like these that set the animal to thinking of something foreign to his work is vastly better than any amount of whipping, and is much easier of application.—American Agriculturist.

M. Gordigiana, of Florence, recently painted, in a little less than two hours, a fine portrait of a Philadelphia public man, for which he received \$600.