ble metals, like gold or silver, he was sure that it would not decay, and it was in danger of but very slight fluctuation in price. He might lay it away for weeks, or months, or years, and whenever he had occasion to exchange it for any article to gratify any of his wants, he would find it to possess the whole, or nearly the whole, of the value which it originally cost him. It is this power of preserving values so perfectly, that seems to have given the precious metals their yreat exchangeability.
When it was found that these metals were more readily exchangeable than other commodities, this fact made them more eagarly sought for, and still more readily exchangeable, so that they acquired the new use of instruments for effecting the exchange of other commodities. At first, the amount of metal given in exchange for any commodity was ascertained by weighing, and this is practiced to a considerable extent yet. In China, notwithstanding the old and complicated civilization of that empire, a large portion of the metal which is used for currency is weighed as it passes from one person to another. The writer of this has sold many thousand dollars' worth of merchandise for gold dust, the several amounts of which he carefully weighed in delicate balances, as he received them. But when the precious metals had passed into use as currency, various governments had portions of them formed into picces of equal size, and the weight stamped upon them, to save the people the great inconvenience and labor of weighing the little quantities whenever they passed from hand to hand. And thus Money introduced itself into human affairs, and commenced the exertion of its great and all-pervading inHuence.
It will be observed that it is the property of exchangeability alone which causes money to be universally sought after. When men are struggling to obtain money, what they really desire is food, or clothing, or fuel, or houses, or horses, or carriages, or books, or some other of the thousand ardicles which contribute to the gratification of human wants. As the obtaining of money is, in civilized communities, the most suitable means of procuring any of these articles, it is not strange that it should be an object of intense and universal desire. When a business man hires money, the money is not the ultimate object of his wants, but some other form of property. If a farmer hires it, he exchanges it presently for plows, or horses, or cattle, or manure, or seed, or something else which will aid him in the cultivation of his land. If a manufacturer hires money, it is with the intention of exchanging it for machinery, or raw material, or labor, or some kind of capital which will facilitate his operations. If a merchant procures a loan, he exchanges the money for merchandise, which he may seil for more than its cost, and thus increase his possessions. Wide spread and intense as is the desire for money, it is only desired because it can be exchanged for other kinds of property.

## the safety of the federal city.

It cannot have escaped the attention of our readers that the political newspapers at the present time are made the channel of many very ridiculous, as well as injurious rumors, tending to increase the alarm of our people in reference to the present state of things. One of the rumors which have been industriously propagated is that an attempt would be made to seize the Federal City by an armed force, and thus close up all access to the city from the Northern and Western States.
Inventors are writing to us daily, in reference to this matter, foarir $s$ the possibility of such a scheme, which, if successfyl, would prevent them from obtaining their patents. We feel bound by a sense of duty to our readers to state our convictions that no such project need be fearcu. We believe that many of the rumors in regard to it are mere inventions, set in motion to influence the public mind. No such contingency can possibly arise unless the authorities of Maryland and Delaware sanction it, and we do not believe there are any considerable number of our people in any section of the country, however much they may differ on other matters, who would approve such a scheme. We indulge a hope that, before the 4 th of March next, some peaceable solution of our present political troubless will be reached. We have faith in the conviction that the crisis will be fully reached by the 1st of February, and that no blood will be shed.

# How to Treat Horses. 

We have already announced the fact that the celebrated horse-tamer, Mr. Rarey, has been giving a course of lectures in this city, upon the proper methods of treating horses and other dumb beasts, such as are adapted to the service of man. These lectures, accompanied as they have been by practical demonstration, have met with extraordinary success, and have convinced the public that pounding, punching, kicking and otherwise maltreating this noble animal will never cure him of vice. Rarey assumes that when the horse has been brought to realize his master's supremacy, he will cheerfully obey his slightest command as soon as he fairly understands what is required of him. And he never can be made to understand his master's wishes if maddened by cruel treatment, or frightened out of his wits by angrily-shouted orders. We must allow time for impressions to be made on his intelligence, and never confuse him by giving fresh orders before the preceding one is thoroughly comprehended and obeyed.
It is a peculiarity of the horse to examine all suspiciousobjects by touching them with his nose, as man touches them with his hands. Show him a drum, saddle, buffalo-robe, a string of bells, a wagon, or any other thing, and let him touch and smell it until he is satisfied it will not harm him, and he loses all fear of it. But suddenly thrust at him a strange object, without giving him time to examine it, and he flies away from it as naturally as we would under like circumstancés. Hence if a horse is very nervous, and difficult to saddle, harness, or hitch, it only requires a littie forbearance on our part, and a little time, to overcome his restiveness, and make him willing to be saddled, harnessed, or hitched. Show him saddle, harness, and wagon, instead of hiding them from him; let him touch, smell, and even taste them if he will until he understands that they will do him no harm, repeat the lesson a few times, and your victory is certain. But fling a saddle or harness suddenly on his back, and he will make a wild jump to save himself from his imaginary foe, as naturally as a man would if even so harmless a thing as a twig should fall on him when travellug at mgit in a aense rorest 1 a a sumange lana. You may club the poor horse for jumping until you smash his skull or break his legs, and he will only jump the more in the increased agony of his fear. Rarey's system is thus correctly epitomized by the Tribune: "Obedience to man is the ruling principle of the horse ; disobedience the penalty of bad teaching. To make him obey, it is only necessary to make him fully comprehend what is required of him. He has originally no conception of his strength as compared with his master's, and never will have until they are foolishly matched in a struggle. It is the part of wisdom to keep him ignorant in this respect, by mastering him by gentle but thorough treatment at an early age. In the horse, as in man, fear is the result of ignorance ; hence he may be accustomed to a locomotive or any other frightful object, by giving him time and opportunity to examine it in his own way. All these fundamental laws which underlie the Rarey system are very simple to understand, although very little understood at present by the public. Simple as they are, they have required years of experience and observation on his part to develop and define them. When they are once generally recognized, the trouble and danger of horse-training will be at an end.'

Cow Bells.-It is said that a good cow bell of rolled sheet iron, well made, 10 inches deep, with a mouth 3 by 6 inches, can be distinctly heard at a distance of from three to five miles. An exchange says that a farmer in England provides all his cows with bells tuned to different notes of the scale, and the whole running through several octaves. A visitor to this farm is charmed by the music, as well as by the sleek sides of the cattle. Sometimes he hears several notes in unison, then a slight discord, and then a sweet harmony, and all varied by distance and by rising and falling of the brcezc.

Money.-We have not altered our mind in reference to the practice we announced a few weeks ago, namely, to take the bills of all such banks, North, South, East and West as are considered solvent at home for subscriptions, patent fees, \&c. The finances of the country are gradually improving. Let every citizen adopt for his motto " Peace, be still!"

## Recent American Inventions.

hoisting apparatus.
The object of this invention is to obtain a hoisting apparatus which may have its weight or load readily stopped at any desired point, and a brake automatically and simultancously applied with the stopping of the weight or load. The invention also has for its olject the sustaining of the load or weight in case of the breaking of the lifting rope, in such a way as to insure a certain effectual action or operation of the load-sustaining mechanism. The invention has furtherfor its object the counterpoising of the platform in such a way that, in case of the breaking of the lifting rope, the connection of the counterpoise will not interfere in the least with the load-sustaining mechanism. The inventor of this device is E. G. Otis, of Yonkers, N. Y. rallroad car starter and stopper.
This invention consists in the arrangement of two toothed racks placed in different vertical planes and one above and the other below the axle of a railroad car, in combination with suitable springs and with a sliding pinion, in such a manner that, by throwing said pinion in gear with one or with the other of the racks (according to the direction in which the car is moving) the springs are compressed, and if the pinion is now shifted so that it gears into both racks, the car is stopped. If it is now desired to start the car in either direction, the pinion is shifted so as to gear into one or the other rack, and the force of the springs, which has a tendency to bring the racks back to their original position, is exerted so as to turn the axle and the wheels in the desired direction. In order to provent danger, should the momentum of the car be so great as to drive the racks clear back to the last tooth, the last tooth of each rack is so made as to yield, being kept in the required position by springs applied in such a manner that the pinion, on coming in contact with each tooth, may revolve without injury to its own $\operatorname{cogs}$ or to those of the racks. The inner teeth of the racks are cut half-way, so as to allow the pinion to rotate freely between said racks; and the clutches or dogs which retain the pinion on the axle and cause it to rotate with the same, are placed in such a position that the cogs of the pinion are allowed to enter the teeth of the racks before said clutches take effect, whereby the danger of trriking The wame
is obviated. B. Morohan, of Brooklyn, is the inventor of this apparatus.

## Sharks About-Beware of Them.

The moment a patent is publicly issued to any of our ingenious fellow-citizens, the recipient's name and post-office address become the target for scores of circulars through the mail from greedy adventurers of every name and condition. A sends a circular, printed like a private letter, confidentially advising the patentee to expend a few dollars in lottery tickets, for which the writer is the agent. B is a dealer in patent rights, and coolly solicits a small advance, for which he will almost warrant a sale of the patent forever so many thousand dollars, and, perhaps, inclosing with the circular a blank power of attorney or assignment, which he requests the patentee to sign. C is an obscure patent agent, whose clients are few and far between, his only resource being to send a long yarn to the newly fledged patentee, informing him that his patent will be good for nothing, unless said poor patent agent is allowed to patch or doctor it up-of course, the mode of treatment is to bleed the patentec. We warn our readers to beware of all these greedy parasites, and to employ only such attorneys as are known to be trustworthy, and never to remit money to persons of whom they know nothing. Money expended in lottery tickets is the poorest investment we know of, and we would not advise any one to risk a single cent in so hopeless an enterprise.

The safe-key of the Revere Bank, Boston, with a million combinations, became disarranged recently, and the mechanical skill of the maker could not open it. Business was at a stand-still. A gang of workmen were at last set to work to batter down the masonry.

There were 1,040 gallons of wine made at Fort Madison, Iowa, during the past season; and as the business is only in its infancy all over the State, Iowa may be set down for a large yield next season, should the weather prove favorable.

