FARM AND GARDEN NEWS.

ITEMS OF INTEREST ON AGRICULTURAL TOPICS.

Fence Rows--Feeding Drilled Cora Too but, like a good many old sayings, they light yield. Early---Etc., Etc.

VER.

It is a great mistake to pasture cloblood to begin with, it is impossible to ver after the hay crop is mown off. secure the best results. What is bred as close in the drills as is wanted-It is not merely the trampling of the in the bone will show in after life, some for worms and some for birds; clover crowns by the hoefs of stock, and the well bred animal invariably then if it all comes up it is easier and but still more the check to root growth makes the best showing, other things quicker to cut out every stalk than it when the clover top is eaten down, being equal. is to replant.

he gets it.

fidently hopes for success.

ing machine, using three and one-half

about every eighteen inches.

SUCCESSFUL CORN CULTURE.

after the corn is through the ground

that prevents clover roots from striking down into the subsoil. There are make an animal thrive if half fed and the man than there is in the land." on many farms supplies of mineral carelessly housed, and that a scrub Therefore stir the soil.-A. R. Peters plant food that neither the plow can may be made a pretty fair animal by turn up nor any other plant can reach giving it extra care, but this is not until clover roots have piloted the what the modern stockman wants. way.

CLEANING OUT FENCE ROWS.

Since the introduction of horse mowers and harvesting machinery, there is less care taken to keep weeds and grass out of the fence corners. It was always an ugly task to mow gross in the corners of fences, for that was the common dumping place of stones thrown out in plowing the field. Now nobody thinks of using the scythe if he has a machine. But it is a mistake not to mow the weeds and bushes that grow in fence corners, so as to prevent weeds from going to seed and the bushes from becoming an unmanageable nuisance, encroaching on the plowable land.

FEEDING DRILLED CORN TOO EARLY.

There is a great temptation to farm- adays .-- Farmer's Voice. ers whose cows begin to fail in their

milk to cut sowed or drilled corn before it comes in tassel. The cows will not eat this, provided they can get enough grass, and it is poor feed at the best. It is far better if such fodder corn is given to supplement it with grain, wheat bren or meal of some kind. Drilled corn is much better than sowed corn, as the sunshine can get in between the drill rows, which at Sow the seed by hand or broadcast by least should be far enough apart to allow cultivation between them. Sowed corn, even after it comes in tassel, to four pounds per acre. If the seed is 's of little good stock. All its lower part, even on rich ground, will be white and have almost no nutritive value.

MILK FOR POULTRY.

At this season of the year young ous and healthy growth. If fed with while those that have been seeded ear- home. grain and green foods the results will ly and attained their full growth in the He told his errand and dilated upon milk is of great value to laying hens, and fibrous. After thinning, the ruta- saying:

WELL-FED IS HALF-BRED. run the cultivator through, so my son This is an old saying that has some tried a one horse harrow and pulverbasis for truth, and another that was ized the crust. The rest of the seathe keynote of the success of John son was very dry. Our corn made a

Ross, a famous Ohio feeder, was that good yield, while other fields that were "the corn crib is the best cross," Both not cultivated after the crust was The Second Growth of Clover---Cleaning Out these sayings are along the same line, formed stopped growing and made a

Good seed is very essential. It stop short of the whole truth. No amount of care will make a scrub ani- should be selected before cold weather THE SECOND GROWTH OF CLO. mal as good as a pure bred one that is and should be kept in a dry, airy place. given equal attention. This is the Cold will not do any damage to prop-

foundation of success. Without good erly dried seed corn. I believe corn should be drilled twice

It has been said: "There is more in It is true that the best blood will not

THINNING FRUIT.

The principal cause of so much He is after the best there is, with the small, scabby and ill shaped fruit beintention of giving it good care after ing sent to market is that the fruit grows too thick on the trees. If a

The up-to-date stockman has learned crop of corn, turnips, or any of our anthat it is impossible to economize in nual crops is planted too thick the care and make the greatest profit. He damage is only for the present; but if must be lavish of care and liberal in a tree be allowed to bear too full, it the matter of feed, and after this con- may injure the next and perhaps the next two or three crops in the future. The day is passed when a lot of cat- If a peach tree, for instance, is quite tle or sheep can be turned into a wood full, it may be thinned to one-half at lot or out on the range, and allowed to any time before the seed hardens and work out their own salvation and make will be able to produce as many pounds money for the owner. The people who of fruit as it would if not thinned, and eat meat have become better educated of course of better quality. It is the and native beef or stringy mutton does maturing of the seed that exhausts the not go with them. They want beef vitality.

from well bred steers and mutton from Some varieties of fruit are recognizwell kept sheep, and if they cannot get ed as alternate bearers, and the reathese in one place they will go to an- son is obvious. They are so busy maother until they find it. Well fed is turing their enormous crop this year half bred to a certain extent, but well that they have no time to prepare bred and well fed is what counts now- fruit buds for the next; besides, their vitality is so exhausted that they require a year or more of good care to RUTABAGAS ON NEW BREAKING. prepare them for another crop. By a proper and judicious thinning these The cheapest way to raise rutabagas same trees may be brought to a habit is to select a piece of rich sod land, of annual bearing of good and profitafree from weeds. Plow it carefully ble crops that will handle quickly, to a depth of four or five inches, then sell readily and for double or triple the with a sharp tooth harrow or disk price of small, knotty fruit. Farmers thoroughly fine the top two inches of could well afford to take a little time soil to form a loose mellow seed bed. from the regular farm work and thin their fruit trees. means of some kind of a grass seed-

When Sovereign Meets Sovereign.

It is not generally remembered that to be sown by hand mix it with four times its bulk of wood ashes or bran. Don Carlos, the claimant to the Span-Sow in narrow strips about tea teet ish throne, was in America some years wide by going back and forth. When ago, but the fact remains, and he the plants are about four inches, thin then came in contact with the Ameriso as to leave only one vigorous plant can spirit to such purpose that he is likely to remember it,

Rutabagas should be sown about the While in New York he was taken ill, chickens, especially if in confinement, last of June, and through the first half and an equery of the suite was disshould have liberal feeds of skimmed of July, as they will then make their patched post haste for a celebrated milk. It is muscle and flesh forming, main growth quite late in the fall and physician to attend the royal paeasily digested and produces a vigor- be tender and julcy when gathered, tient and found the physician at

be often surprising. Sour or clabbered hot summer months will become hard the rank of his master, and finished by

whether in confinement or on the bagas sown on new breaking will re-"And if you will have the goodn range. Prominent poultry men who quire no further culture and can be to come at once and incognito, for raise eggs for market make a practice left alone until the time of gathering. the suite must not know that Don

NEVER CARES TO WANDER

Miles After Material.

The range of the honey bee is but that they go only a short distance. It mander. may be curious to many to understand how any one can tell how far the bee stood.

Years ago, when the Italian bees ferent from the common bees already Tribune. here, were easily distinguished, and after any bee keeper had obtained the Italian bees they could be observed and their range easily noticed. If bloom is plentiful near where the bees Noble Act of a Mississippian in the Storming are located, they will not go very far, perhaps a mile in range, but if bloom is scarce they may go five miles. Usumay go profitably.

Bees have been known to go as far as eight miles in a straight line, crossland. It is wonderful how the little Graves said: honey bee can go so far from its feet, many of the bees would get forget the heroes yet living whose lost.

So to move a hive, if done in the winter time, it would be all right, but chivalry in this hall to-night. Let me if in the summer time it should be tell you the splendid story which his done after dark, or when the bees are modest lips have never told: they are not likely to leave that particular kind of bloom for any other will go after sweets, even if in the dark, if close. However, any kind of sight, but if covered, so as not to emit of them.

Not a Pleasant Neighbor.

Before he turned his attention to tality of the deed. He was the first navigation by steam, Robert Fulton to reach the flag; his sword was raised invented a marine torpedo, which he when he heard swift footsteps behind endeavored to dispose of to the Uni- him. He paused, turned, and saw his ted States Government. Succeeding in commanding officer, to whom he was interesting James Madison, then see

an English officer, took possession of his horse, which was very beautiful, The Busy Bee Doesn't Go More than Plve and immediately mounted it. When

the English cavalry fled the horse ran away with his captor, notwithstanding all his efforts to restrain him; nor little understood by the masses, many did the animal stop until it was at the supposing that bees go for miles in head of the regiment of which, apsearch of nectar, while others think parently, its master was the com-

The melancholy, and at the same time, ludicrous figure which Macdonmay fly, but this is simple when under- ald presented when he thus saw himself the victim of his ambition to possess a fine horse, which ultimately were first introduced into the United cost him his life upon the scaffold, States, these bees, having marks dif- may be easily conceived .- New York

CHIVALRY AT CHAPULTEPEC.

of the Fortress.

The Hon. John Temple Graves, in a brief speech before the Georgia Wo- Recently some ingenious fellow has inally about three miles is as far as they men's Club, told on the spur of the vented a machine which comes so near moment a beautiful story-a true story filling the place of the teasel that the -which embalms the heroism and demand for them is likely to come to surpassing chivalry of a gallant vet- an end. ing a body of water that distance to eran now living in Atlanta. Mr.

"This is an era of heroes. We are home and ever find its way back to its glorifying the prowess of Dewey and have to be sorted according to size own particular hive. If, while the Hobson and Blue and crowning them and handled twenty-eight times before little bee is out of its home or hive, the with immortal memories. And this is they are ready for market. The points hive should be removed some ten or right. The appreciation of heroes pro- of the hooks on the teasels are finer twenty feet, according to the surroun- duces heroes. Men do not mind risk- than the finest cambric needle; in fact, dings, when it came back to where its ing their lives for a country that will so fine that one can't find them exhome was first located it would be remember the daring. And the time cept by feeling for them. The teasels hopelessly lost. If its home was in an to recognize heroes is while they live, are used for raising the nap on cloth, open space, with no other objects close, not after they are dead. Let us re- and so far nothing has been found to it might find its way home, but, even member our present heroes while they fully take their place .- Portland Oreshould the hive be moved only a few are with us, and let us not now or ever gonian.

prowess glorified an earlier day. "There is a hero and a knight of

not flying, and even then the bees | "The war with Mexico is a part of should be stirred up some, and smoke our martial history. Taylor and Scott blown in at the hive entrance and a and Lee came out of it immortal. The board or some object placed in front epic of that great struggle was the of the hive so that the bees in coming storming of Chapultepec. That frownout may mark their new location. Bees ing fortress was the Gibraltar of Mexno doubt, are guided by sight and also ico. Its massive walls seemed imby sense of smell. They are attracted pregnaple. But American daring haltby the color of bloom, as , if they are ed at no obstacles, and an intrepid at work on a certain kind of bloom, band of volunteers was chosen to scale and assault it.

as long as they can find that kind. few who braved their way through "Among the first of the dauntless Again, bees are often attracted to shot and shell to the fortress on that sweets by their sense of smell, for they dreadful day was a young Mississippian, handsome as Alciblades, proud confident, and thrilling with patriotic sweets may be placed in glass in plain fervor. He was among the first, if not the first, to scale the wall, and, any smell, the bees will take no notice sword in hand, dashed along that storm-swept rampart in advance of all his fellows to cut down the waving

flag of the enemy and reap the immor-

Power of Powder.

gon's thirteen-inch rifles. Five han-

shot a velocity of 2,100 feet per sec-

From Santiago Via London.

A member of the House of Com-

mons, who has two nephews who are

shell from the forts. Immediately all

the chief engineers were summoned

from the whole fleet by signal, and

were brought aboard this ship to give

advice as to the gun. They all looked

A '- Tease. Farm.'

For a number of years Sawtelle's teasel farm, in a pretty nook on the border of Molalla prairie, has been an attraction to people en route from Oregon City to Wilholt Springs. A party of wheelmen from Portland made a halt there a few days since and were shown over the place by Mr. Sawtelle, who has been engaged in raising teasels there since 1860. He has over fifty acres of teasels this year, and will handle the output of forty acres raised by neighbors. He has large sheds for storing and curing the teasels, and a number of ingenious machines for trimming and sorting them and preparing them for market, which requires much skill and knowledge of the requirements of the manufacturers who use them.

Any one can raise teasels; in fact, they will grow themselves, but very few can market them. Mr. Sawtelle says he is going out of the business.

The crop of teasels is being harvested now. They are cut as soon as the blossoms begin to fall. They

Woodpeckers and Their Ways.

Woodpeckers as a class form one of the most striking and easily distinguished groups of birds. Their legs and feet are short and stout, with the outer toe turned backward parallel with the hind toe as an aid in climbing. In certain species, however, this outer toe is entirely wanting.

Their peculiar method of gaining a livelihood has developed a tongue perfectly adapted to their requirements; it is pointed and barbed at the tip for securing the larger insects, and it kept constantly coated with a mucous substance to which the smaller ones adhere. At the back of the mouth it divides, and passing each side of the neck at the base of the skull is carried up over the top of the head, where the two portions join and are inserted in the right nostril. In the common bairy woodpecker, and possibly some others, it curves downward and is wound about the bony case which protects the right eye, the latter projecting more than the left for its accommodation. This double bow enables the bird to shoot forward and contract the barbed tip with wonderful velocity, while the mucus is applied each time from two large glands at each side of the throat .- Appletons' Popu-

of buying this milk from dairymen The roots should be gathered in the Carlos is not well." tions.

VALUE OF CLEAN STABLES.

tribute to the separator good points at least two feet of soll and pack it which it does not possess. For exam. down firmly. Roots can be kept in the ple: A dairyman recently made the pit until spring, if desired, as they remark when it was mildly suggested will not be injured even if the ground of the regular army for the men in that his stables were not as clean as should freeze to a depth of three or their commands, whenever opportunthey might be, that all odors and filth four feet. From 500 to 700 bushels of ity presents itself, is well illustrated in at the creamery where the milk was Judd Farmer. sold. No one will question the value of the separator for doing what it was intended to do-separate the butter fat from the milk-but it surely never was ful corn culture is to have the ground intended to remove filth. The dairy- well tile drained. Next, the ground man who will deliberately permit filthy cows and stables to be the rule should be forced out of business, and is wet and soggy, but when the earth the time is not far distant when cream. ery operators will find a way of deboard of the plow. tecting the source of supply of tainted and filthy milk. Then the dairyman deeper each time until the soil is sevwill be forced to do what he should now voluntarily do as a matter of de- be well pulverized before the corn is cency.

PREVENTIVE MEASURES.

the corn gets chilled and the result is An ounce of prevention is even bet, the same as in stunting young animals. ter than a pound of cure in dealing If the ground is warm before the corn with insects. High culture and fer. is planted it comes up very soon and tilization is one of the best prevent grows rapidly. I believe most farmives of insect attack. Fertilizers such ers plant their corn too deep, and as coarse stable manure applied at the when cultivation begins the implement rate of fifteen to twenty loads to the drags clods on to the little stalks and acre to sod in winter and ploughed un- covers them up. A case in point: A der for corn in early spring will help neighbor (a good farmer) planted his prevent the attack of white grubs and corn this spring-tolerably deep. Some wireworms even in badly infested days after the planting he hauled a fields. Tobacco stems and waste, a load of corn to his corn pen and stopvaluable fertilizer, is used against a ped the wagon on the planted ground. sucumber beetle, cabbage maggot, etc., Some of the corn sifted through the caught fire over fifty years ago, and to prevent their feeding and depositing bed and was not covered. It came up has been burning ever since, has at eggs. before the planted corn and is now

If a crop is grown for a number of growing rapidly. successive years in the same field the Cultivation should commence before was set on fire by the engine working insects injurious to it are liable to in- or very soon after the corn comes up the fans, and, although many costly crease to the greater detriment of the through the ground and should be concrop each year; a system of rotation tinued at least once a week until laid it, they have been unsuccessful. The will avoid this to a great extent. The by. The cultivator should be run tolgeneral farm management should keep erably deep the first time; after that, forth in the ground in volcano fashion. in mind preventing insect depredations shallow. The greater the drought the The fire was prevented from spreadand attack by selecting the proper time more necessary it is that the cultivaling beyond the one area by reason of for ploughing and sowing, selection of tion be kept up.

plants liable to attack, clean farming, A few years ago when our corn it, and so saved adjacent mines. burning or converting into manure all was laid by there came a heavy rain, trash and rubbish .- Massachusetts which left a smooth crust all over the When tea was first brought to Engfield. The corn was then too large to land the leaves were eaten. Ploughman.

and creameties at a low price and fall as soon as there is danger of frost. "Is Don Carlos too ill to come to find it very profitable. Milk in any Pull by hand and cut off the tops me?" asked the doctor, calmly.

form contains the elements needed by quite close to the root. Place in piles The equerry drew himself up both the young chicks and the laying of about one bushel each and allow haughtilyy. "No; but my master is hens in connection with the other them to dry in the sun for a few hours, by right a sovereign, and he does not foods usually given. It is inexpensive after which they will be ready to haul visit a commoner nor any one but a even when it must be bought, and home and store. In the absence of a sovereign. Commoners go to him." will do more to make the growing good root cellar it is best to dig in a "Well." returned the physician, imchick a profitable laying pullet during dry place small pits about five feet in perturably. "I'm an American comthe winter than any other food. Win- diameter and three or four feet deep. moner, and a sovereign, too-sovereign ter fed, it seems to be all required in Fill the pits quite full of roots, top. of my profession. If your master the way of a "condition food." to say ping them up a little in the center, wishes to see me he must come where nothing of its value in other direc- Then cover carefully with coarse hay I am, since you say he is well enough. or straw. Let the covering extend I care nothing about seeing him, as far about two feet beyond the edge of the as I am concerned, but I will receive pit and cover it all over to the depth him."

Many dairymen are inclined to at. of two feet on top; on top of this put Don Carlos came .- New York Press.

An Incident in Front of Santiago.

The affection displayed by officers which might by accident get into the rutabagas can be raised on one acre the case of Brigadier-General Chammilk were removed by the separator if the season be favorable .- Orange bers McKibbin, now at Santiago. Something like eighteen years ago a flag pole was raised in the old garrison at Fort Marcy, the pole now standing in front of the old company The first important thing in successheadquarters. Michael McCabe, of this city, was first sergeant on Captain McKibbin's company, then stamust be properly prepared. Plowing tioned at this post. McCabe was the proud father of a boy called Fred. born at the post. When the flag was will crumble as it falls from the moldraised Captain McKibbin held the infant McCabe in his arms while the The ground should be plowed a little child pulled the cord which raised "Old Glory" affoat. The boy grew to en or eight inches deep, and it should man's estate here at Santa Fe, and when his country called enlisted in planted. Should 'there come a frost E Company of the "Rough Riders." and was a participant in all the heavy fighting around Santiago done by Roosevelt's regiment. By the merest chance he met General McKibbin there, and the old officer displayed great feeling when he ascertained who young McCabe was and embraced him like a father. Such acts and such feelings make the American soldier what he is-the best and most intelligent fighter in the world.

Burning for Fifty Years.

A coal mine in Scotland which last burnt itself out. The mine is on the Dalquharran estate, Dailly. It attempts have been made to extinguish flames have from time to time burst the "dykes" of rock which intersected

retary of state, in the matter, he ob- gated.

tained a small appropriation from the "And then this gallant Mississsip-Government for the purpose of conpian, without a moment's hesitation, ducting some public experiments. In with the bow of a Chesterfield, lowthe summer of 1806 he invited the high ered his sword and with the point at dignitaries and a number of promirest stood aside while his friend and nent citizens of New York to Governor's Island to see the torpedoes and of Mexico and was bulletined for the machinery with which his experiments | laurels of that splendid day. were to be made. While he was lec-"In the history of battles there was turing on his blank torpedoes, which never more gallant, more chivalric were large, empty copper cylinders, deed fban that. And the real hero of his numerous auditors crowded Chapultepec, maimed and gray, but around him. After a while he turned glorious still, sits just beyond me here to a copper case of the same descrip- to-night in the person of my noble and

tion, which was placed under the gate- beloved friend, General William S. way of Old Castle William, and to Walker of Atlanta." which was attached a clockwork

Drawing out a peg, Fulton set the "Velocity and pressure," explained clock in motion, and then he said in the powder mill superintendent, "are solemn tones to his attentive audience: the two main requisites in proving "Gentlemen, this is a charged torpedo, powder. The government is very spewith which, precisely in its present clfic in its contracts. It demands that state, I mean to blow up a vessel; it when fired under service conditions, in contains 170 pounds of gunpowder, and the gun for which it is intended, powif I were to suffer the clockwork to der must give to the projectile a muzrun fifteen minutes, I have no doubt that it would blow this fortification to zle velocity of at least a certain number of feet per second without pro-

ducing a pressure of more than a The circle of humanity which had certain number of tons to the square closed around the inventor began to inch. For modern guns the velocity spread out and grow thinner, and berequired varies from 2,000 to 2,300 feet fore five of the fifteen minutes had passed there, were but two or three the possibilities. whence it had been taken. "For example, I may cite the Ore-

How War Horses Act.

dred and fifty pounds of powder in When horses are hit in battle, they these guns impart to an 1,100-pound stop, tremble in every muscle and groan deeply, while their eyes show ond, and the energy of the projectile wild astonishment. During the battle 'is nearly 34,000 foot tons. This power of Waterloo, some of the horses, as is sufficient to lift such a vessel as the they lay on the ground, having recov. Oregon, eight feet out of the water .-ered from the first agony of their San Francisco Call. wounds, fell to eating the grass about

engineers in the American Navy, is reimals were observed quietly grazing ceiving from the fleets a correspondence which would awake the envy of two hostile lines, their riders having been shot from their backs, while the many newspapers. Their descriptions illustrate the readiness and efficiency the tumult behind and before and of the American Navy. One of his correspondents relates that in one of the bombardments of Morro Castle one of the guns of one of the American ships was put out of action by a

shock with the enemy took place.

hour the gun was back in action, as Major Macdonald, having unborsed sound as ever !- London Chronicie.

tenderly attached and deeply oblilar science Monthly.

fle Didn't Know About the Hairpins.

"By Jove," exclaimed the bridegroom, as he sat down and tugged away at his mustache, "this is too commanding officer cut down the flag | bad!"

They had just arrived at Niagara Falls, and the porter had just bowed himself out after carrying up a trunk that weighed 487 pounds, for which be received a 50-cent "tip."

The frightened girl dropped her traveling hat upon the center table and stood as if transfixed, with one of her gloves half off.

"What is it, Harry?" she asked.

"This is a fine go," he muttered. "I wonder how in the world I ever came to do such a foolish thing?"

Then he felt in his pockets again and cast a hopeless look at the big trunk. "You-you haven't lost your pocket-

book, have you?" she asked. "No, darling," he answered, "but I

left my keys at home, and the one that opens your trunk is among them." "Oh, is that all" she exclaimed, with a happy little sigh. "Here,"-and she removed a hairpin from her rich brown locks- "open it with this, Now I know that I am the only girl in whom you took a real interest. Otherwise you would have known. Ah, Harry, dear, I'm so happy!"-Cleveland Leader.

Just Played Spaniards.

The Illinois boys on the cruiser Cincinati, which was recently undergoing repairs at Norfolk, played an entirely different role one afternoon from any since enlisting under Uncle Sam. They were for a time Spaniards-that is, representing the enemy-and furnished much amusement to nearly 3,000 people at Virginia Beach. The entertainment was given for the benefit of soldiers' families. The Illinois men, always popular, were selected to take the part of sailors on a fleet representing Camara's Port Said fleet being destroyed by the Norfolk Light Artillery Blues.

When Camara's ships were destroyed the Illinois jackies tumbled into the sea and were rescued by the crew of the life-saving station. The boys got much praise for their clever work, and the entertainment netted a good sum. Chaplain Chidwick watched the destruction and the rescue,

The Cincinnati looks odd. Her mainmast has been taken out and she only has her foremast for signaling purposes. The removal of the mainmast makes the Cincinnati the only "single sticker" cruiser in the navy .-Chicago Times-Herald.

Scows for carrying earth Jredged from the bottom of rivers are made with a large dumping trough pivoted at each end of the scow and locked in an upright position until the dumping ground is reached, when a hoek reeases the bottom of the scow.

atoms."

lock.

at the greatest possible distance from the torpedo, and they did not again appear on the ground until they were assured that the engine of destruction was safely lodged in the magazine,

them, thus surrounding themselves with a circle of bare ground, the limited extent of which showed their weakness. Others of these interesting anin the middle of the field between the

balls that flew over their heads, and around them caused no interruption to the usual instincts of their nature.

It was also observed that when a charge of cavalry went past, near to any of the stray horses mentioned. they would set off, form themselves in the rear of their mounted companions, and though without riders, gallop strenuously along with the rest, not at the gun and examined her damstopping nor flinching when the fatal aged machinery, and the result of their

combined wits was that in half an At the battle of the Kirb, in 1754,

in a second, and the pressure is not allowed to exceed fifteen tons to the square inch. In some of our guns of the present day the amount of energy stored up in the powder charge is so tremendous as to be almost incredible. The limit of energy upon the projectile cannot be estimated, so vast are

persons remaining under the gateway. Some, indeed, lost no time in getting