### AGRICULTURAL.

OFFICIAL GRADES OF GRAIN.

At a meeting last week of the committee on grain at a New-Vork Produce Exchange the following efficial grades of grain were established:

Winter Wheat.

Extra white winter wheat shall be bright, sound, dry, plump and well cleaned. No. 1 white winter wheat shall be sound dry and reasonably clean.

No. 2. white winter wheat shall consist of sound white winter wheat unfit to grade No. 1.

No. 3 white winter wheat shall consist of sound white winter wheat unfit to grade No. 2. No. 1 red winter wheat shall be sound,

dry, long berried and well cleaned. No. 2 red winter wheat shall be sound dry, and reasonably clean, weighing not

less than 581 lbs., Winchester standard, and shall not contain more than 10 per cent white wheat. No. 3 red winter wheat shall consist of sound winter wheat unfit to grade No. 2.

Extra red winter wheat shall be sound, dry and clean, weighing not less than 594 lbs. to the measured bushel, Winchester standard. No. 4 winter wheat shall include all

sound winter wheat unfit to grade No. 3 red. Mixed winter wheats shall be all white and red wheat mixed, and shall be equal to

No. 2 red in all other respects. [Note.—No. 1 red and No. 2 red wheats that grade steamer shall be graded steamer No. 2 red.]

Extra white oats shall be bright, sound, weighing not less than 32 lbs. to the measured bushel.

No. 1 white oats shall be bright, sound and reasonably clean and free from other grain, weighing not less than 31 lbs. to the measured bushels.

No. 2. white oats shall be seven-eights white and equal to No. 2 oats in other res pects, weighing not less than 28 lbs. to the measured bushel.

No. 3 white oats shall be mainly white, reasonably sound, reasonably clean and reasonably free from other grain, weighing not less than 25 lbs. to the measured bushel.

No. 1 cats shall be bright, sound, reasonably clean and reasonably free from other grain, weighing not less than 31 lbs. to the measured bushel.

No. 2 oats shall be reasonably sound, reasonably clean and reasonably free from other grain, weighing 28 lbs, and over to the measured bushel.

No. 3 oats—all merchantable oats unfit for any of the above grades, shall be graded No. 3.

Rejected oats-all oats damp, unsound, dirty or for any other cause units for No. 3, shall be graded rejected.

## Soils.

The soil is that portion of the earth's surface that contains a mixture of animal, vegetable and mineral substances in such proportions as adapts it to the support of vegetation. The common standard divides these into nine different kinds. Six of these have reference to the amount of sand or clay which they contain, and the other three to the amount of lime which they contain, although nearly or quite all soils contain more or less lime.

Some soils retain moisture much better than others. Some contain a larger per cent of available plant food than others, and some contain the materials necessary to secure a good growth of one class of plants and some

of others. Before selecting a farm, the kind of or pa intended to be grown should always be determined, and so far as poseible a variety of soil selected that is best adapted to grow the

desired crops. The classification commences at pure clay profits. of which there is but a small amount compared to soils that contain no more than ten per cent of pure clay. A clay loam, a loamy generally found, and they may include to a molds.

more largely benefited by under-draining, when the highest prices for eggs are usually by fall plowing, and needs frequent stirring obtained. to keep in a loose or mellow condition. It is generally heavier to plow and cultivate. and requires more work to get into good tilth. A sandy soil, on the other hand, dies

thrive best in the one will not grow so well other countries where the claims of other in the other. Soils undergo more or less agarics are allowed the mushroom itsel changes, and can be changed to a more or is not used. Finally, I feel myself (and materials. Ashes, lime, sand and other that I would rather die than subsist of quantities to make a material change in the | we experience toward this class of food character of a soil.

necessary.

# DIGGING AND STORING ROOTS.

Roots should not de topped soo soon after digging. The tops should be given a few hours to wilt, after which the juices will have become more solidified. If topped at once, before they have time to prepare for the change, there will be more or less bleeding from the portions out, to the detriment of the roots.

After being topped, they should not be long exposed to the sun and wind. They should be piled in heaps of ten or twelve bushels, and covered with coarse wild grass or some such material that will exclude rain, but still allow the sweating process to ge on

unimpeded. They need not be removed from these temporary pits until quite late in autumn, when Each race, each class, each section of the heavy freezing begins. Their final housing population, each unit even, vaunts its own can thus be done at a time of leisure, or after

the rush of the other work is over. Roots are easily kept in pits through the entire winter. A long, narrow pit or trench may be dug, large enough to contain the and practices, but the question that rather tions of three or four feet in length, with walls of earth a foot or so in thickness, be- of much true life at all .- [Home Journal. tween the sections. When so arranged, a

should be alternate layers of straw and earth, and should extend several feet over the sides of the trench to prevent freezing from undermeath.

### THE RAIL ON A SUMMER FALLOW.

I kept a summer fallow free from weeds, destroying a heavy crop of thistles and Couch grass this season with one plowing in June and one in September. Before I could turn the plews into it in the spring the weeds and grass had formed a heavy crop at least 15 inches high. They were turned under by fastening a chain to the plow beam I harrowed and then allowed it to stand until the second crop of weeds began to show up. It was then worked with the steel rail to or three times during the summer, and the young weeds torn up by the roots, fell back over the rail and withered in a short time in the hot sun. The result is a thoroughly clean field this fall with the least possible outlay of time and labor. I have had very little experience in agricultural operations, and my experiments with a steel rail may contain nothing novel or instructive to readers. But far as I can ascertain I the first in this district at least to ntilize railway iron for cultivating the soil, and my new way of working my fields has excited some comment among older far mers, sometimes not quite complimen tary to myself.

### A VALUABLE AGRICULTURAL IMPLEMENT.

It occurred to me last spring that a steel rail would be an efficient implement to spread manure, and I borrowed one from the Canada Atlantic R. R. Co. with which to make the experiment. The manure, a large proportion of it night soil, had been reasonably clean and free from other grain, deposited on a four acre field. I hitched two heavy teams to the rail, about four feet from each end, and started them, taking a sweep of 30 feet each time. It worked admirably. The field was level, and after going over it four times with the rail, which was done more quickly than once with the harrow, I had the satisfaction of seeing the manure not only evenly spread but well incorporated with the surface soil. In half spread as much manure as 20 men could have done in the same time with forks and

#### AGRICULTURAL NOTES.

A window facing south in the poultry house this winter will pay in increased

From a careful experiment of a Massachusetts farmer, it is shown that the manure from eight hens in one year is as valuable as

that from a cow during the same time. The present average rate of monthly wages for farm labor in the United States, according to the department of agriculture, is \$'18.24 without board and \$12.35 with board.

sell corn, oats, and hay early, and then have to buy the same class of articles before the next crop is raised.

time to apply manure to fruit trees. The soluble portions of the manure sink into the soil during the months before the commence-

ment of growth in the spring. G. W. Campbell says grapevines can be safely pruned in freezing weather and outtings made while the wood is frozen, unless the cold has injured the wood and buds, or the wood is allowed to thaw out rapidly.

A very large part of the crops grown upon the farm in the shape of grain should be turned into meats and butter and cheese before it is sold. In this way the land is kept in fertility and the product is very much more valuable and concentrated. The farmer who raises crops through the summer and feeds them through the winter has double

sults the entire year than when they are alsoil, and a sandy loam are the three most lowed to roam at will, sensibly remarks an owner appeared. experienced poultry keeper. The hens that more or less extent the last three, viz .: have free range will sometimes lay more marly soils, calcareous soils and vegetable eggs in summer than will those that are confined; but the hens that are properly cared A clay soil is usually wet and cold; is for during the cold season will lay at a time

# AND YET, WHY NOT?

Every district has its local practices in food, and the peasants look with the out rapidly, and is usually easily worked in greatest suspicion on any new dish, and to good tilth, and is greatly benefited by can rarely be induced to adopt it. Though dragging or rolling to make more com- it has been abundantly proved that many of the fungi are excellent eating, such is The best treatment for clay soil would be the force of custom that the mushroom the reverse of a sandy soil, and to a consid. | alone is ever publicly recognized, while erable extent plants or varieties of crops that | curiously onough it is said that in some less extent by the application of different | the gentle reader probably feels the same materials can be readily applied in sufficient insects, such is the deep seated disgust Yet it is notorious that many races of It is the difference in the character of respectable people adopt a diet of this the soil that makes different treatment sort, and only lately a book has been published giving a detail of excellent provender of the kind we habitually overlooknasty morsels of caterpillars and beetles, and so forth.

And, indeed, when one comes to think of it, what can it be but prejudice which causes one to eat the periwinkle and reject the land snail, or to prize the lively prawn and proscribe the cheerful grass hopper? Why do we sit on chairs instead of on the floor, as the Japanese do, or on cushions like the Turks? It is custom, and perhaps it suits with our other customs. The more we look into our life and consider the immense variety of habit in every department of it-even under conditions to all appearances exactly similar -the more are we impressed by the absence of any serious necessity in the forms we ourselves are accustomed to. habits of life as superior to the rest, as the only true and legitimate forms; and peoples and classes will go to war with each other in their assertion of their own special belief amount to be stored, and this filled in sec- presses upon the ingenuous and inquiring mind is whether any of ne have get hold

out disturbing the rest. The top covering by being married at sunrise.

### WIT AND WISDOM.

Pastor-"Thomas! Don't you think your yerents would feel very sore if they knew you were fishing on the Sabbath? Thomas "Yes, sir; but not half as sore as I'd feel if they found it out."

An infelicitous spinster once declared with great decision in the presence of Mrs. Partington, that she could not bear children. "Perhaps," replied the old lady, "if you could, you would like them better."

Putting it delicately-"I hope you appreclate the fact, sir, that in marrying my daughter you marry a large hearted gener ous girl." "I do, sir (with emotion); and I hope she inherits those qualities from her

-"I have called you three times. I am very much annoyed." Charlie (who is fond of Bible stories) -" Well, the Lord called Samuel three times and He didn't get mad about it, did he?"

handwriting? Florence—Yes, dear I'm engaged to him, you know. Myrtle-Yes, I know it. I was engaged to him last summer. Florence -The dear boy, I wonder who will marry him, eventually.

Says an old Yale College man : "I never knew whether to attach any significance to it or not, but when I was in college the law school adjoined the jail, the medical college was next the cemetery and the divinity school was on the road to the poor house."

Thrifty mother-"Ellen, why will you persist in eating the soft part of your bread and leaving the crusts under the edge of

Dingues-"Shadbolt, can you spare five dollars ?" Shadbolt-"Certainly, Dingues here it is." Dingues-"Thanks; I'll just give you my note for the amount." Shadbolt (who knows him)-"No use wasting paper, Dingues .I told you I could spare the

There is truth in the remark that a bag, a day, with two men and two teams, I had if empty, hangs loosely by its string, but trough, and bolt their food as nearly whole the more there is put in it the closer is the mouth drawn and the harder it is to get anything out. So, often, as men have more means to give, is it more difficult to obtain a condition to profit from an understanding money from them.

"I notice in the paper," said Mrs. Barracks, pouring out Mr. Barracks' coffee, "that a Brooklyn clergyman says that women should be permitted to whistle." "Yes," retorted Mr. Barracks, agreeably. "He is right. We should surely not deny to woman a privilege we accord to tug boats and loco-

One day a small boy was urging his grand. pa to sing, contrary to the wishes of the old gentleman, who did not know one note from another. The entreaties of the child finally induced him to try, and his efforts One reason that there are so many mort. after a few strains were rewarded by the gaged farms is because so many farmers following-" Grandpa, I guess you had better talk it."

"Every rose has its thorn, you know, Mr. Willbe," remarked Miss Everglade, as she It often happens that autumn is the best refused him after a year's courtship. "! know," was the stricken man's reply; "but roses don't eat caramels, go to the theatre and wear jewellery, and I think I'll make my next venture after about twenty years' meditation."

Very stout old oid lady (watching the liens fed)-"'Pears to me, mister, that ain't a very big piece o' meat for such a animal." Attendant (with the greatest and most stapendous show of politeness on earth)-" I s'pose it does seem like a small piece of meat to you, ma'am, but it's enough for the lion."

Some one took an umbrella from the hallway of a Lewiston man's house and about the same time the dog was missed. A search was made and the dog was at last found in a Lisbon street store, and standing near him was the missing umbrella. A stranger had Fowls that are confined to yards and kept | come into the store followed by the dog. warm in cold weather will give better re- When he went out he left the umbrella, which the dog carefully guarded until his

> In one of the courts recently in the Midland Counties, a woman was testifying on behalf of her son, and swore that he had worked on a farm ever since he was born. The lawyer who cross-examined her said :- "You assert that your son has worked on a farm ever since he was born ?" "I do." "What did he do the first year?" "He milked," she replied. The whole court laughed heartily, and the witness was questioned no further.

# The Power of the Silent Votes

So much is certain: Neither through money nor through passionate appeals to party prejudice can those elements in whose power the decision lies be brought to change the judgment they have once formed, or to desert to the camp of the enemy. It is what is called the silent vote that decides at the last moment; and there is no doubt that on the 6th of November many a man will cast his ballot into the urn without having indicated beforehand whether he is inspired for Harrison or believes in Cleveland. It will, in truth, be a secret ballot -more secret than ever in the history of this country-and in its result many politicians of the old school may have reason for astonishment.

# Editorial Thrift in Dakota.

The Daadwood "Daily Pioneer recently made this announcement to its readers :-"Very satisfactory arrangements were concluded between Prof. Molitor and the "Pioneer" for a joint supply of wood for the winter. The professor pays for the wood, and the manager of the "Pioneer" bucksawe it into proper lengths, when it becomes common property. The "Pioneer" is on very friendly terms with its neighbours."

# Very Muscular Christianity

The seamy side of the English Establish ment is revealed in an advertisement which recently appeared in the London "Times," and which read as follows :- "To Noblemen and others .- A young clergyman, fond of riding, driving, shooting, hunting, cricket, and all out-door sports, would be glad to hear of a good living. Address, Ivanhoe, 147 Chancery Lane, W. C."-[New York Tribune.

Smith says that he isn't lazy. He lies abed to economise. It costs noching to section may be taken out at any time with- A New York girl has varied the custom sleep, but the moment he wakes up his expenses begin.

## How to Live to a Good Old Age.

The first lesson to be taught and learned -that all disease is the result of broken law; that much of it might easily be avoided by the observance of the laws of health on the part of the individual; that much more, which is beyond the reach of individuals, might be prevented by the combined efforts of communities and the state; and that those diseases which are entailed upon this generation by the law of heredity, might by obedience to law be gradually stamped out of existence, and future ages be freed from their curse.

The next thing to be taught is the laws themselves -and with the laws, and of even greater importance, the habit of obeying them. We know a great deal more than we put in practice. This is the fault of the Mamma (with much show of indignation) common modes of health teaching. Our newspapers and periodical literature contain a vast deal of popular instruction in these matters. They are treated of in an abundance of well written books which are within easy reach of all who care to read Myrtle-Florence, is that Fred Dumley's them. Our schools are taking hold of the good work, and instruction in hygiene is fast coming to be recognized as an essential part of even an elementary education. But all these do not reach the evil, or if they do,

they only touch it on the surface. Our schools are full of good grammarians who do not use respectable English in common conversation. So, too, they may be full of glib reciters of the laws of health, who do not observe a single one of the laws they have learned. The main point is to secure obedience. The greatest criminals are usu. ally well versed in the laws of the land : but their knowledge does not avail to keep them out of the penitentiary when they have your plate? Some day you may be glad to broken these laws. Neither will a knowledge get even crusts to est." Thoughtful daugh- of the laws of health keep a man from being ser-"Yes, mother, that's what I'm saving sick, so long as he does not live up to his

knowledge.

We are creatures of imitation. Example counts for more than precept. The parent knows the law, and the child knows it too. When the parent keeps it, then the children will keep it also. It does little good for a child to learn at school that the food should be properly masticated, when three times every day at home he sees a hungry group crowd about the table like pigs around a as it can be made to go down. The child whose mother gives it a bite of something to eat every time it cries for it, will not be in of the law that food should not be taken between meals, until it is too late for the knowledge to be of much service. The law of pure air and proper ventilation may be taught ever so plainly in the text-books, but to the boy who is brought up to sit and sleep in a close, unventilated room, foul with the breath of living beings, and to shun fresh air as he would a plague, the knowledge will be of little avail. While his father's cellar is filled with decaying meat, vegetables, and all manner of filth, and the cesspool smells to heaven from beneath the kitchen window, all the teachings of the schools will not prevent his having typhoid fever, or diphtheria, or some form of filth disease, when the summer sun calls into activity the germs of disease which are latent there. If liquors are kept upon the sideboard and wines are served upon the table in his home, not all the teachings of all the temperance text-books in the land can be relied upon to produce in him habits of sobriety and total abstinence.

It is the practice of the principles of hygiene in our homes, and this alone, which will lessen the rate of disease and death today, and develop a stronger race to-morrow. The child who has learned the laws of health from his father and mother, by seeing them continually and persistently applied, will come to follow them in his own case, as naturally as he will conduct himself properly in good society, if good society has been his birthright, and gentlemanly conduct has become habitual.

# Unnatural Sleep.

There is no common error more productive of mischief than the belief in the harmlessness of sleep-producing drugs. The supposition that sleep under the influence of a medicine of any sort, is a substitute for natural sleep, is a mistaken one. Remedies of this sort must sometimes be used, but their habitual employment is most mischievous. We quote with approval the following from the "London Lancet," one of the leading medical journals of the world :-

"When we are weary, we ought to sleep; and when we wake, we should get up. There is no habit more vicious than adopting measures to keep awake, or employing artifices, or, still worse, resorting to drugs and other devices, to induce or prolong sleep. Dozing is the very demoralization of the sleep function, and from that pernicious habit arises much of the so-called sleeplessness-more accurately, wakefulness-from which multitudes suffer. Instead of trying to lay down arbitrary rules as to the length of sleep, it would be wiser to say : Work while it is day ; sleep when you are weary, which will be at night, if the day has been spent in honest and energetic labor. When you awake, rise; and if the previous day's work has been sufficiently well done, the time of waking will not be earlier than sunrise.

"The difficulties about sleep are almost uniformly fruits of a perverse refusal to comply with the laws of nature. Take the is done.

two of these manful struggles against a perrectify the error or avert the calamity."

# Sore Throat From Milk.

A recent epidemic of sore throat in Canterbury, England, in which more than two hundred persons suffered, was traced to the use of milk from a certain dairy, the cows ing at the portals of our pretty little river of which had suffered from diarrhea. diseases may be traced to this source.

pepular.

## Wits Go Wool Gathering.

" Do you know that many business men are half crazy when they enter a restaurant at noon for lunch or dinner? This was said to a reporter by the owner of a well known restaurant, who continued : "Their minds are not upon what they are doing; their brains are busy as can be figuring and planning. Their bodies left their counting toonis. but their heads remained. They, as a rule, eat hurriedly, and any number of them do so mechanically. I have seen them do the most absurd things possible. Often it happens that one will throw down one cent at the cashier's desk with a seventy-five cent or fifty cent check, and wait for a minute or two for the change. And these are sharp, shrewd calculating business men, who if you entered their places of business, you would find alert enough, and who would never make a mistake in giving out or receiving money.

"They show their mental abstraction in various ways. One will come in, and with deliberation place his hat beneath his chair, yet when he has done eating he will rush to the rack, and, seizing somebody else's hat, go out, probably not discovering his error for a day or two. It is a positive fact that not long ago a man with a 72 head wore out of my place a 61 hat, which would scarcely stay on the top of his head. Nor did he discover his mistake until he reached his

"One day a man stepped up to my desk and complained that he had lost his hat, a very fine one which had cost him \$7 or \$8. His hat had been stolen, he charged, and he was excited and angry. Would you believe it? It was he who had stolen one. I discovered a few minutes later that two days before he had taken the hat of another, leaving his own. The one he took was of the same material, but had been worn an entire season, being greasy and soiled; still, he wore it without discovering the fact until the time he made the complaint, although his own hat was a

fine brand new one. "It is truly odd how men will behave about hats. Frequently one will come holding one in his hand and tell me he did not wear that when he came in. I look at the faces of these, and if they have but just been shaved, tell them they made the exchange at the barber's and did not discover their error until they came in here. One man made a great ado because, as he said, some one had carried off his hat, when invertigation showed that he had worn another man's hat to the restaurant, picking it up as he left the office, but not detecting it until he had eaten. Going out to eat at noon is not an interval of rest to most business men, because there is no rest. They must supply the wants of their inner man, but they do it without any rest of the brain. Their occupation is before them all the while, as their far away looks show. They say and do things in the most mechanical manner, and will skip from twenty-four to forty-eight hours in their computation. A level headed man of business insisted up and down, while holding his own hat in his hand—a nice silk one-that it did not belong to him. He knew what he had worn down townit was a white one, he declared. He probably had done so the day before, but would not be convinced of his error until the name on the inside of the inner band revealed it to him. A man picks up a heap of human nature in our business, because all sorts of things occur, particularly at the noon rush. when men do some of the most absurd things in the world, and are often most unreasonable because of their self absorption.

# Scenes in a Spanish City.

The antiquities of Toledo are not the only interesting things. The sights from day to day on the streets and in the family circle are peculiar. The very children have queer sports. One of their favorite pastimes is to parade in a dark hall with slow step and drone a chant in imitation of a church festival service. Boys are also fond of playing bull fights, "the bull" part being taken by some lad not distressed by rough handling. Owing to the narrow streets, everything seems mixed up together-wine shops, vege tables, children, citizons, cadets, loafers and beggars mingling in one mass.

The people generally are simple and good natured. The chief street is shaded by awnings, and every public doorway is screened by a striped curtain. Foreigners visiting the town are dubbed the "Strangers," and so referred to on every occasion when designation is necessary. The leading place of amusement is called the "Grand Summer theatre." It is within the ragged walls of a once grand building, now half torn down. It is quite a common thing in the evening to hear guitar duets in the narrow, dark streets, being given as serenades to ladies in the house before which

the playing is done. The skill displayed by some of the players is marvelous, and the music is delightful. The treble is carried on a small instrument called a "mandura" that makes a most pleasing combination with the guitar. Often prcfessional players are hired to go and play before a house, and will thrum out native airs for several hours, smoking cigarettes assiduously all the while.

# A Lesson to Learn.

There are other things besides speech in case of a man who cannot sleep at night, the pursuit of which men, once fairly or rather, who, having fallen asleep, wakes. | launched, often do not know when or how If he is what is called strong-minded, he to stop. A man begins business with every thinks, or perhaps reads, and falls asleep promise of good success. He has energy and again. The repetition of this lays the judgment to start with, and perseverance foundation of a habit of awakening in the to overcome the obstacles which may meet night, and thinking or reading to induce him. His ventures are successful, his emsleep, and habitual sleeplessness occurs, for ployes are faithful, his future looks bright. which remedies are sought, and mischief All would be well did he but know just when or where to stop, or, knowing this, did "If the wakeful man would only rouse he have the resolution to enforce it upon himself on waking, and get up and do a himself. But he presumes upon his past full day's work of any sort, and not doze good fortune, continues to make ventures during the day, when next the night comes too long and too heavily, and failure overround, his sixteen or twenty hours of wake. takes him. Or he presumes on his physical ullness would be rewarded with sleep of strength, and does not take needed restnine or ten hours in length; and one or his powers give way, and he is left a wreck. Not a business man alone, but men of every verted tendency to abnormal habit would occupation, with energy and ambition, need to learn this lesson when to stop, if they would not make failures of their lives.

A correspondent of the Victoria Times writes:-The Bay of Nanaimo is literally alive with the fall salmon, swarming, awaitfor the first flush of the freshet, when that lamb connected with the dairy had had sore | mighty army of finny soldiers will start en throat. It is more than probable that many | their crusade upwards and onwards, pursuing their way until thousands of them line the banks of rivulets and streams, having wasted Fashion note-large cheques will still be their lives and energy complying with Nature's great laws.