

FARMERS' CLUB.

The Farmers' Club of the American Institute held its regular weekly meeting at its Room at the Cooper Institute, on Tuesday afternoon, Oct. 25, the President, N. C. Ely, Esq., in the chair.

THE USEFULNESS OF BIRDS.

Mr. Robinson read a communication from the Rev. Mr. Weaver saying that his trees had been unusually free from canker worms, and he attributed it to the presence of large numbers of reed birds.

Dr. Trimble:—Mr. President, I must say a word for the reed bird. Were it not for birds we could not live; insects would destroy the whole of our grains and fruits. One of the most valuable of all is the reed bird. When I see bunches of these brought into our markets in the fall I am pained and grieved. It does not eat the curculio, but it eats the canker worm and it eats your span worm that gets on the trees in this city. Last spring I was standing with a friend by Madison Square when he called my attention to the great numbers of reed birds in the trees. We watched them, and they continued to come till there were 300 or 400 of them in the square. They were feeding on the span worm, and it was curious to watch their mode of feeding. They could not rest on the slender ends of the branches where the worms were, and they would flutter off in the air and approach the worm till they could catch him with their beak. The worms seemed to have an instinct that their enemies were after them; they felt a jarring of the limbs, and they began to let themselves down by their webs in hundreds. The reed birds are not flycatchers like the king bird and the swallow, and they could not catch the worms while suspended thus in the air.

Mr. Marshall:—Is the reed bird the little black bird that comes in flocks?

Mr. Robinson:—No, it is the cherry bird.

Dr. Trimble:—The male is marked with yellow on the tips of its wings, and it has a crest on its head which it can raise at pleasure.

Mr. President, I have devoted all of my leisure this summer to dissecting and examining the crops of these insectivorous birds, and I have no doubt that if a knowledge of their usefulness could be spread throughout the community, it would result not only in laws for their protection, but in a public sentiment also which would enforce these laws. The most valuable bird that we have is the Baltimore Oriole. That eats the curculio, the great destroyer of our fruit.

Several other subjects were discussed, but we select the above only for our columns.

Sharp Practice at the Oil Wells.

The *Philadelphia Ledger* has the following interesting statement in regard to oil:—

"The next Legislature will, we suppose, have to make some new laws on a subject in regard to which the past history of jurisprudence can afford but little guidance, while the principles of justice involved are in some parts very clear, but in others remarkably doubtful and complicated. We allude to the equitable rights of owners of oil wells and the proper manner of protecting one person or company against the injuries which may be easily inflicted upon them by a neighbor, without violating any law at present on the statute book.

"If a man in a city owns a house, and because he owns it, chooses to set it on fire and make a bonfire of it openly, though he may cause the destruction of no life nor defraud any insurance office, nor injure any one besides himself, it is a punishable crime, and if his neighbor's property is thereby burned it is arson. But at the oil wells nothing is better understood than that two neighboring oil companies will, in many cases, willfully and maliciously flood each other's most productive wells for the sake of procuring a lucrative compromise. And when two large and profitable companies quarrel it is a sort of war among the gods, and the stockholders and small fry get out of the way. Down goes the stock twenty or thirty per cent, and when a compromise is effected up it goes again. A few days ago the *Pittsburgh Commercial* thus noticed a making-up of matters—not, perhaps, of precisely the kind to which we allude, but nearly enough to give the idea:—

Dalzell, which a few days since was dull at 8½c., sold freely to 9c., and many holders refused to sell at 9½c. It is said that a long pending controversy between this

Company and the Columbia, arising out of their wells interfering with each other, has been adjusted, and that both will now realize a large increase of oil.

"Many of the best wells tap the same underground current of oil, and these can be easily made to injure one another most vitally. When a well is put down, it passes through many currents of water before it comes to the oil, but this is prevented from doing injury to the well sunk, by an iron tubing like gas pipe, each joint screwed into the other as it is let down. But in spite of this water would run down outside of the pipe and choke up the well and spoil it, but for a leather bag fastened round the pipe and made water-tight. This bag is filled with linseed, which swells after it is down below all the seams of the water, and renders it impossible for the currents to run down beside the tubing. If at any time the tubing is drawn up, however, down-rushes the water, and thus not only one well, but all the wells connected with it, become flooded, and pump nothing but water.

"Now there are some proprietors whose wells do not pump much, but these underground streams of oil connect them with rich flowing wells, and they draw their tubing on purpose, by flooding their neighbors' wells and making them worthless, to force a compromise by which the products of the good well and the poor one shall be equally divided. In equity this is about as if one neighbor should say to another, 'Your barn is full and mine is empty; go shares, or I will set fire to mine, and the sparks will consume yours.' But there is no law against this sort of underground work of revenge and destruction, as there is against arson, nor in the nature of the case can there be one so easily framed, because it is often really necessary for the proprietor of an oil well to draw his tubing to alter the working of his pumps, or else to lose all benefit from his well. You cannot, therefore, prove the malicious intention as you can in arson, and each man is therefore presumed to have a right to draw his tubing without interference, especially in the absence of law.

"The case, therefore, comes nearer to this. In a city one man, by pulling down his house to rebuild, will often cause the destruction of his neighbor's house, especially if he goes on to deepen his own foundation below it. Just so far as he is obliged to avert injury from his neighbor in the one case, so it would seem he ought to be restricted from flooding his neighbor's well in the other, especially where malice is presumable. But how to frame laws equitably and practically efficient to effect a remedy for these deep underground wrongs, it is difficult to see. A new Solon and a second Daniel come to judgment would seem requisite."

Whistling Bullets and Blazing Cartridges.

The correspondent of the *Philadelphia Inquirer* writes from before Petersburg as follows:—

The other day Colonel Brewster, commanding the work, observed one of the men intently at work on a nondescript missile. He had run several bullets until he had got one nearly as long as his finger, and in this he was laboriously cutting notches along its entire length. The curiosity of the Colonel was excited, and he inquired—*cui bono?* "I'll show you directly Colonel," was the reply, and he did so, finishing his work; at last he loaded his gun in the usual way, and then put his nondescript on top of it. Pointing his gun rebelwards he fired, and his load went whirring and whizzing with very much the noise of a good sized shell. "There," said the soldier, with intense satisfaction, "I've had a little shelling on my own account, and skered them fellers over yonder." And undoubtedly some rebel had "ducked" when he heard the noise of that decidedly harmless "shell."

They have a practice along our lines of getting up impromptu fireworks after this wise:—A soldier puts in his cartridge, and then a second one, the powder of which has been wet. The gun is fired, and the wet powder of the extra cartridge goes flying through the air very much like a comet with an abbreviated but exceedingly brilliant tail. Out of this, although the first bullet, or even the second, may carry death or mutilation across the rebel parapets, our boys extract a prime article of fun.

The great engines of the *Dictator* made over 30 revolutions with ease, lying at the dock.

Grant's Railroad.

Who but a parcel of Yankees would ever have thought of building a railroad along the battle-line of an army, with one terminus the outer chain of fortifications? These Yankees who have settled around Richmond have done this thing. The railroad goes over the ground with a most sublime indifference to its ups and down. If you are seated in one of the last cars of a long train, half the time the locomotive drawing you is out of sight over a hill; but the best of all is the covered way, where the road runs through the field near Hancock, under the fire of the rebel batteries of Whitworth guns on Cemetery Hill. The rebels used to amuse themselves by shelling the trains. They never did any damage, but it was judged best to make sure against mishaps, and so a breastwork for the railroad was thrown up across the entire field. Down into the cut goes the train, and whirls safely under the friendly cover of earth to beyond the point of danger. With all its goings up and comings down, with all the instability of its roadway, there has never been any accident on the road, no train ever collided, none have ever got off the track. The railroad is a great thing.

Erosion of Lead by Insects.

The fact that there are insects of different species which bore into lead has been heretofore known, but a correspondent of the *London Times* recalls attention to the subject in a *resume* of proceedings as to it in the *Comptes Rendus*. The insect which bored French bullets in the Crimea was not known in Russia, but is said to be common in the Jura, in France, and in Germany and Sweden, as well as in England. It is a wood insect, and usually attacks silver firs and pines. It is the larvæ of the insect which attacks the lead—not the perfect insects, which die in the excavated passages even immediately after the metamorphosis, as very often occurs with insects in general. Roof and other sheet lead has been known to be bored by a species of *Bostriche* (*B. Capucina*). The *Sirex gigas* also often cuts its way into lead by means of its mandibles, as also the *Callidium sanguinum*; and lead pipes have been perforated by an insect named *Apate humeralis*. The mandibles of some of these insects consist of a saw, toothed and cut like a file. Perforations in lead ascribed to corrosion may sometimes be the product of the mischievous industry of such insects.

India-Rubber Packing for Stuffing Boxes.

The stuffing supplied by Unger's India-rubber manufactory, Berlin, consists of washers of various diameters, made up alternately of layers of sail-cloth and vulcanized India-rubber, rolled together and compressed in a compact mass. By using this packing, the irregularities in the motion and the escape of steam attending the application of the common hemp packing are entirely suppressed. Its durability is four or five times, its price about twice, that of the common packing. Herr Jacob, engineer of Hettstadt, has applied this packing with great advantage to a 20-horse power steam engine, working at a pressure of about 25 lbs. per square inch, and making 14 or 15 revolutions per minute.

[Similar packing has been used here for years.—Eds.]

STORING POTATOES.—Dig the potatoes in fair weather, sort out such as are desired for table use next season, and put them in boxes or barrels, filled in among the potatoes with dry sand or fine dirt. Keep them in a dry cellar where they will not freeze, and in the spring when they start their sprouts, turn them out, take off the sprouts, and then put them back in the boxes.

STEAM ENGINES IN PRUSSIA.—From an official return recently issued it appears that the total number of steam engines at the end of 1862 was 8,653, with 365,707 horse-power, showing an increase of 5,821 engines and 273,243 horse-power, as compared to 1852, when there were only 2,832 engines, with a total of 92,462 horse-power.

The terror of the desert of Sahara is being removed by the application of science. In 1860 five wells had been opened, bringing fishes to the surface from a depth of 500 feet. Vegetation is springing up around the wells, and the "desert will blossom like the rose."