

possible, and they will fatten fast: so with plants;—the more you can make them eat, the faster they will grow. Look to your crops, as much as you would to your cattle; see that the leaves straighten out flat and handsome in the evening; if they do, you may know that they are growing well. The animals eat the grass, and it goes through a chemical process in the stomach of the animal, and the part that is not necessary for its growth passes off; and so with the plant;—what is not necessary for its growth, passes off in vapor. Crops can be injured by watering too much as well as too little. Crops will tell you when they want watering, if you will examine them by the leaves. The time that your wheat wants the greatest care, is about the time that it is heading out; and be careful to give it all the strength that you can about the time that it blossoms, that every blossom may hold its kernel, and not blast. I think that if it has sufficient strength and nourishment at this time, we can have a hundred or more kernels in a head; and that will be the way to get a large crop.

In the States, all that we could do to secure a good crop was to prepare the soil as well as we could, and trust to the rains. It is not so here: we have a rich soil, and the rain in our hands; and what is there to hinder our getting as large crops as we can wish for?

It is not the tallest wheat that produces the most to the acre: where the straw is very thick and tall, it prevents the heat getting to the ground so as to warm it enough to make it fill as well. To obviate this difficulty, do not feed it as much as it will eat; let the leaves be a little more rolled, or not straighten out so soon after the heat of the day is past. The more nourishment you give it, the less it will roll; because it is continually feeding while it is evaporating, (when it can.) Short straw does not prevent having large heads; there are as many places for the grains of wheat in the heads that are on short straw as on the tall; and I never saw a head of wheat but what had places for more grains, and would have had more, if it had had more food. It is hard to tell how many berries could be in a head, if it had strength enough given to it at the right time; and I wish that some one who is observing would try the experiment, and let the public know. When the ground is moist, and does not want water until about the time of heading, you can not control the growth of the straw. When the leaves of the grain continue rolled up after sunset, you then know that it is suffering for water. Keep the leaves out straight as much of the time as you can, and then the grain will grow fast and be healthy.

If we have the materials that are necessary and employ a skillful architect, we can have as large and as good a building as we want; and so with our crops;—with practice and close observation, with skillful and scientific men, we can go ahead of all other countries. By understanding the whys and the wherefores, I believe we can raise one hundred bushels of wheat to the acre. I wish some one that is a philosopher, chemist, and sound reasoner, would take hold of these few ideas and carry them far enough to be beneficial to the community, and publish the same.

A. G. FELLOWS.

☞ We like plainness and simplicity; therefore we like the above. Receive the good, and improve upon it; refuse the false,

if any there be, and repeat your experiments. A good farmer in a rainy country, needs experience in the mountains, to be always successful.—[Ed.]

For the News.

DEAR SIR:—In reading some of the late papers from the States, I discover that some in the northern States are not willing that the fugitive slave law should be put in force, to take runaway slaves back to perpetual servitude; and their cry is "Liberty and the Constitution of the United States;" while some in the southern States also are much excited, and think they have a good deal to complain of. They argue that slavery was allowed, and slaveholders protected by the framers of the Constitution, and their cry is also "Liberty and the Constitution of the United States." The actions and arguments of these parties seem to me very much like those of the sectarians, whose cry is that God and the Bible is their rule and standard, and at the same time are as much at variance in their belief in the principles contained in the Bible, as are the heathen and the Christian, or as light is with darkness.

While ruminating over these things, I asked what is liberty? The answer naturally came to my mind, that the rule "do unto others as you would they should do unto you," allows all men liberty of thought and conscience, so that it injures no one; for it is no liberty where a man enjoys freedom of speech and conscience to the detriment of another; for it takes his liberty from him or injures him, which would be contrary to a principle so perfect, great, and glorious, as the one above named.

But has this great Republic, which assumes to be based on this principle, extended her folds wide enough to take in every stranger who might wish to make this country his home? For instance, could the Egyptian, who worships cats, owls, and lizards be protected, if he came to the United States? Would that philanthropic feeling be manifested in the professors of the Bible, so that they would allow him to vote at the elections? or if such a man was born in this country and adhered to the belief of his fathers, would they cast their votes to place him in the presidential chair, provided he was a firm supporter of the Constitution, and fully competent to fill the place? If so, liberty is blooming.

Again, there is the Mahometan with his Koran, his prophet, and his five, ten, or fifty wives: can liberty of speech and conscience be extended unto this class of people in the United States, and they be protected in their religion and belief? Could the people of this boasted land of liberty vote to put a Mussulman with his wives in the White House, if he was competent to fill the presidential chair, and was born in this land? If so, liberty has found a home.

Why should we not protect the Mahometan with his Koran and wives, and the Egyptian who worships animals and birds, as much as the Shaker who professes to believe the Bible and does not have any wife; or the infidel who does not believe in God or the Bible, and believes in having but one wife; for the Mahometan and the Egyptian have as much right to their belief as we have to ours, if they do not injure or interfere with

us in property, character, or person. It is true that it hurts the feelings and traditions of a Christian to see Mahometanism practiced, and vice versa; but true liberty includes them all within her scope, and these differences of opinion respecting one wife, many wives, or no wife at all, and of religions, and liberty, slavery and anti-slavery, are as the Irishman said of eating meat on a Friday—"It's all in your edicashun."

If these scattered thoughts, thrown hastily together, are worth a place in the News, you are at liberty to use them.

Respectfully yours,
HOMER.

Correspondence of the "Farmer and Mechanic," New York, Jan. 9, 1851.

DEAR SIR:—For the last four years my attention has been more or less directed to the subject of aerial navigation, in the practicability of which I am a firm believer, but (judging from your article in a late number on the subject,) I should judge you were of a different opinion. I have observed with considerable interest the progress of Mr. Taggart's experiments, hoping for their success, though I have no knowledge of the arrangements by which he proposes to effect the object, except the few hints contained in one of the New York papers at the time of his late effort, which, with your remarks alluded to above, have induced me to lay before your scientific readers a plan which appears to me to embrace the correct principle of aerial navigation. The arrangements of the parts in the engraved representation, would no doubt be altered by actual experiments in a large way. As regards the relative size of the float and car, the mode of constructing the frame, the manner of communicating the motive power to the float, &c., I have only been able to test it in a small way—the float being but about eighteen inches long, but still sufficient to satisfy me in regard to the proposed ends.

The principal difficulty in the way of aerial navigation is to overcome the great resistance offered by so large a body as is requisite to render buoyant the car and its necessary appendages. The balloon or float in the ordinary way, as in the case of Mr. Taggart's, offers a surface of about two hundred square feet of positive resistance to the progress of the machine, and this has to be overcome by a counteracting pressure on the same resisting element. A moment's glance at the above arrangements will show how effectually this difficulty is overcome, in the fact that the float, which in the ordinary way offers the greatest resistance, is there converted into a propeller. The difference between forcing a fixed body through any substance, and that of a rotary, is exemplified in the case of an auger; if you attempt to force it through without the rotary motion, there would be perhaps fifty times the power required, than there would be if you turn it in the proper direction—it then to a certain extent becomes its own propeller.

Another great advantage obtained, is the perfect ease with which the float can be drawn to any given angle for ascending or descending, which, in connection with the revolving float, forms the principal of my claim, which is secured.

That we can mount in the air, and float about at the will of the wind, no one doubts,