

THE GREAT SEAL OF THE UNITED STATES.—At a recent meeting of the Historical Society, the well known author of the Field Book of the Revolution, (says the *N. Y. Herald*), read an exceedingly interesting history of the Great Seal of the United States. He commenced by giving an account of the origin of seals from the time of the Egyptian King Cheops to the present day. In regard to the Great Seal, he said, the first committee on the subject was appointed on the 4th of July, 1776. This committee reported in 1779, at which time another was appointed. The report of this committee was presented to Congress on the 10th of May, 1780. Nothing was done, however, till 1782, when the present seal was adopted. This seal was described as follows:—Thirteen stripes, red and blue, on a shield, above which is a blue field, with thirteen stars, intended to represent the thirteen original States. These are all displayed on the breast of the American Eagle, which holds in its right talon an olive branch, in his left a bundle of thirteen arrows, and in his beak a scroll inscribed with the motto, "E Pluribus Unum." For the crest over the head of the eagle there is a glory breaking through a cloud, and within this glory is thirteen stars on a blue field. On the reverse of the seal is an unfinished pyramid, above which is the all-seeing eye, and over this again are the words "Annuit Cœptis"—"God has favoured the undertaking." On the base of the pyramid is the date, 1776, in numerical letters, under which is the following motto:—"Novus ordo Seclurum," which translated means, "A new order of things has commenced in the New World." Mr. Lossing concluded by reading a series of extracts from the prophecies of Morlin in regard to this country, which dates back as much as a thousand years. This prophecy was published in Philadelphia, in 1787, with interpretations, while the convention which formed the federal constitution was in session in that city. Here is the clearest and most pointed of the prophecies:—

When the cock shall guard the eagle's nest,
The stars shall rise all in the West.

The cock is said to represent France, and the eagle America.

THE STAFF OF LIFE IN PARIS.—The average daily consumption of bread in Paris is a million pounds, or a pound for each person; but, as every workman eats three pounds a day, it is found that the consumption of women, of children, and of the aged, which is considerably under a pound apiece, furnishes an ample compensation. The climate is calculated to require a person of good health to consume one pound of meat, one and a half of vegetables, and one and a half of bread, with a bottle of claret, or two bottles of beer. The consumption of bread diminishes in years of abundant wine yields, and vice versa. A heavy rise in the price of bread increases the number of deaths very perceptibly. The 40,000 cats and 70,000 dogs of the city of Paris eat six million pounds of bread a year. Unwise economists have proposed their destruction, in view of the saving that might be effected; but it was clear that it would only provide for six days' consumption out of 365. There are 601 bakers in Paris, who are divided into four classes: the first including those who bake more than four bags of flour a day; the second, third and fourth, those who use three, two, and less than two a day. A bag weighs 34 pounds of flour, and furnishes 408 pounds of bread. Any baker who puts more water into a bagful than is necessary to raise it up to this standard weight, or any one who adulterates his flour by mixtures of carbonate of magnesia, bicarbonate of soda, or powdered alabaster, is punished by a fine of thirty francs and a week's imprisonment. Frauds in bread, however, are extremely rare. Every baker is obliged to keep in store at the City Granary from 50 to 130 bags, according to his class. The total thus stored is about 80,000 bags. In case, therefore, of any circumstance preventing the communication of the city with the country, there is always a stock of flour on hand sufficient for twenty-five days, and with economy for forty.

THE RELIGION OF PAYING DEBTS.—Men may sophisticate as they please; they can never make it right, and all the bankrupt laws in the universe cannot make it right—for them not to pay their debts. There is a sin in this neglect as clear and deserving of church discipline as in stealing or false swearing. He who violates his promise to pay, or withholds the payment of a debt when it is in his power to meet his engagement, ought to be made to feel that, in the sight of all honest men, he is a swindler. Religion may be a very comfortable cloak under which to hide; but if religion does not make a man "deceitfully," it is not worth having.

BURNING GREEN AND DRY WOOD.—An opinion still prevails, in many parts of the country, that green wood gives out more heat than the same bulk of dry. We have even seen persons throw water upon dry wood and upon burning coal, under the impression that more heat was thus obtained. In 1850 we were making a trip down the Mississippi River, on one of two rival boats that chanced to be toasting their relative speed. We took a station near the stream to observe the means used for getting up extra steam. As our boat was evidently falling behind, the streamer explained the reason to be that the rival boat had taken on a portion of green fuel at the last "wooding station," and so to be even a dozen buckets of water were actually drawn up and sprinkled over the dry wood, "to make the fire hotter." We think instances of such ignorance of the principles of combustion and heat are not many among experienced engineers and firemen; still very many persons believe that if wet or green wood is no better, it is quite as good as dry, and large numbers of those who prepare dry fuel do so for convenience of starting and keeping up fires rather than for the profit of it. Let us look at this matter a little.

In all cases of combustion or burning, heat is not manufactured, but developed. There is just as much heat in a given bulk of fuel and air when entirely cold as when they are in rapid combustion. The heat results from the chemical union of the air with the carbon (coal) of the fuel. They condense in uniting, and the heat, before latent or concealed, is now "squeezed out"—so to speak. An expanded, porous sponge may appear dry, and yet become a wet mass when sufficiently compressed. In like manner apparently coal, wood and air may become a heated mass when sufficiently condensed by mechanical means or by chemical action, as the oxidizing or burning process. The principle we would impress is this, that in all cases of condensation, that is, when bodies are made to occupy less space, heat is developed. Hammering a piece of iron into smaller bulk will develop heat enough to make it quite hot. The condensation of the watery vapors of the air into rain or snow gives out heat, and we say "it is too cold for such snow or rain." Boring wood or iron—in short every action, mechanical or chemical, that compresses the particles of substances together, develops heat. When water changes to steam, it occupies almost 1,700 times as much space, and hides or secretes a save amount of heat. The steam formed by a pint of water, though no hotter apparently than boiling water, in reality contains five or six times as much heat.

A block of solid green wood one foot square (one cubic foot) will weigh about 60 pounds, and when well dried only about 40 pounds. This 40 pounds is all that aids in producing heat. The 20 pounds is water, which during the seasoning process, escapes gradually, but if burned rapidly it must all be converted into steam before it can be got rid of. A certain amount of heat is first withdrawn from useful purposes to raise the sap to a boiling point, and then several times as much more is secreted when it changes to vapor. We see then that a cubic foot of dry wood will, in burning, heat, say 120 pounds of water to boiling, and still afford as much heat for other purposes as would be yielded by the same block burned green.

A cord of wood (128 cubic feet) if entirely solid, would weigh, when green, from 6,000 to 8,000 pounds, and when dry from 4,000 to 5,000 pounds—a difference of more than a ton weight in a single cord, which must be handled in loading and unloading, and what is usually quite as important, must be carted from the grove to the place of consumption. As wood is usually piled up, one-fourth to one-third its bulk is usually occupied by the spaces between the sticks, so that the weight of a cord of green wood is from 4,000 to 6,000 pounds, (two to three tons,) or less in the lighter kinds—Still, for every cord of green wood taken from the grove at least 1,000 pounds of useless water is handled.

In whatever way we look at this matter, the use of green wood, under any circumstances, is not economical. Let every one improve this season in getting enough wood cut and dried to supply the wants of a farm until a year from next June or July, or until next Winter's cutting, shall have had sufficient time to get thoroughly dry.

Wood will season even in the coldest weather, and on this account it is better to cut down at once all that must be carted home during the present winter.

We are all accountable for our actions to the good Author of our being; hence how necessary it is that we should always live in perfect uniformity to those divine laws which have been given to us for our guidance through life.

THE DANES.—The Danes are very English in manner and appearance. There is a very fair amount of business and bustle in the streets, well appointed carts and wagons driven rapidly about, and at every town one meets a workman or tradesman whose configuration of nose, whisker, and cheekbone is English every whit. Or if one strolls about the gardens, or takes an excursion to Tivoli, the Vauxhall of Copenhagen, one sees plainly enough from what source the tall slight figures, and the bright eyes and complexions of our English girls are derived. Often when travelling in Germany I have looked in vain among the flat side, broad-footed, wide-faced, low-caste native, for some trace of kindred race and origin with ourselves; but in Denmark we are constantly encountered by groups who would pass muster anywhere for the Anderson girls or the Johnsons, and upon inquiry they will probably prove to be the Johansson girls, or the Andersen. Indeed, we have no reason to be ashamed of our Danish cousins: they are a bold, energetic race, and if we have given them unhappily little cause to love us, they on the other hand have given us every reason to respect them.—*Rev. R. E. Hughes.*

A MORAL LESSON FOR CROAKERS.

THERE is a moral in the following anecdote which is peculiarly applicable at the present time:

An eccentric lawyer, named Burgess, many years ago, lived in a New England village, and became quite famous for skeptical notions. Attending a town meeting, after its adjournment, he lingered among the groups of substantial farmer deacons who composed it, and listened to the prevailing conversation. The bad weather, the fly, the rot, drought and the wet, were duly discussed, when some one turned to Burgess and asked—"How comes on your garden?"

"I never plant anything," replied Burgess, with a solemn face; "I am afraid even to put a potato into the ground."

"It's no wonder," groaned one of the most eminently pious present; "for a man who disbelieves in religion could not expect to have his labours blest."

"I am not afraid of failing in my reward for my work," replied Burgess, "but I am afraid agricultural labor will make me profane. If I planted a single potato, what would be the result? Why, I should get up in the morning, look about, and growl, 'its going to rain, and it will ruin my potato; then in dry—the drought will kill my potato; then I should be unhappy because the rot might destroy my potato, in fact, gentlemen," concluded Burgess, in a solemn manner, "I should be afraid to do anything that would induce me constantly to distrust Providence."

The reproof was keenly felt by many present; and, for months afterward, the farmers, with the fear of Burgess in their eyes, talked of blessings, rather than the evil attending their labors.

PANEGYRIC ON BEDS.—The almost forgotten French romancer, Clemence Robert, thus warmly expressed himself on the comforts of the bed: "A bed is certainly the most precious and most favourable asylum found here below. In fact, when I look at it, and when I think, when I step into it, how one is suddenly, as if by enchantment, rid of fatigue, cold, wind, dust, rain, importunate visitors, tedious conversation, commonplace remarks, pompous assertions, bragging, putting forth headstrong opinions, contradictions, discussions, travelling stories, confidential readings of a poem or a whole tragedy, explanations or systems in long words, interminable monologues, and that in place of all these one has pictures, thoughts, memories to be called up, that he is in the midst of a chosen society, or phantoms and visions, just to the mind, and all these dreams, which a foreign writer calls 'moonlight of the brain;' when I think of all this as I look at a bed, I know not what words to make use of to express my enthusiasm and veneration, and I am almost ready to bow in adoration before it."

FORTUNE.—In whatever country a man may hide himself, fortune and the malice of an evil man will be sure to find him out; for which reason the soul ought to withdraw itself into its impregnable fortress of constancy, whence, if it looks with contempt on all human things, the darts which fortune and the world shall throw at him will fall innocuous at his feet.

Most of the shadows that cross our path through life, are caused by our standing in our own light.

TRUTH.—Men miss truth more often from their indifference about it than from intellectual incapacity.—*Whately.*