

## WEIGHTS AND MEASURES.

In England and America grain is generally rated by the bushel, though it is not the same measure, for here we use the Winchester bushel, which contains 2,150.42 cubic inches; there, since 1826, the legal measure is called the imperial bushel, which contains 2,218 cubic inches; so that 32 of their bushels are about equal to 33 of ours.

The following are the commercial weights of a bushel of different articles, viz: wheat, beans, potatoes and clover seed, 60 pounds; corn, rye, flax seed and onions, 56 pounds; corn, on the cob, weighs 70 pounds; buckwheat, 52; barley, 48; hemp seed 44; timothy seed, 45; castor beans, 46; oats, 35; bran, 20; blue grass seed, 14, salt, 50, according to one account, but Onondaga salt is 56; [the real weight of coarse salt is 85 pounds to the bushel]; dried apples, 24; dried peaches, 33, according to a table lately published in numerous papers, but according to our experience, both are wrong. We have seen thousands of bushels sold at 22 pounds to the bushel which will measure about three pecks.

**HEAPING MEASURES.**—Potatoes, turnips and esculent roots, apples and other fruits, meal and bran, and in some States oats are sold by heaping measure, which contains 2,815 cubic inches. The size of a Winchester bushel measure, is a circular ring with straight sides 8 inches high and  $18\frac{1}{2}$  in diameter. A box 12 inches square, with sides  $7\frac{1}{2}$  inches high, will hold half a bushel.

**COMPARATIVE GRAIN MEASURES.**—Besides the difference between the Winchester and Imperial and heaped bushels, before stated, there are a dozen or more local bushels. For instance, at Abington, England, 9 gallons; at Penrith, 16; at Carlisle, 24; at Chester, 32, *et cetera*. In France, the *setier* is as 4.427 to 1,000 compared with the Imperial bushel; that is 4,427 bushels. In Holland, the *mudde* is as 3.157. In Prussia, the *scheffel*, 1.479. In Poland, the *korzec*, 1.451. In Spain, the *fanega* 1.599; that is, 99-thousandths over a bushel and a half.

**BARREL MEASURES.**—Rice, 600 pounds; flour, 196 pounds; powder, 25 pounds; cider and other liquids, 30 gallons; corn, 5 bushels, shelled. By this latter measure crops are estimated, and corn bought and sold throughout most of the Southern and Western States. At New Orleans, a barrel of corn is a flour barrel full of ears. In some parts of the West, it is common to count a hundred ears for a bushel.

**TON WEIGHT AND TON MEASURES.**—A ton of hay, or any coarse, bulky article usually sold by that measure, is twenty gross hundred, that is, 2,240 pounds; though in many places that ridiculous old fashion is being done away and 2,000 pounds only counted to a ton.

A ton of timber, if round, consists of 40 cubic feet; if square, 54 feet. A tun of wine is 252 gallons.

**A QUARTER OF CORN** is the fourth of a ton, or eight Imperial bushels. This is an English measure, not in use in this country, though very necessary to be known so as to understand agricultural reports. So of several of the following weights and measures:—

**A LAST**, of soap, ashes, herring, &c., 12 barrels; of corn, 10 quarters; of gunpowder, 24 barrels; of flax or feathers, 1700; of wool, 12 sacks.

**A SACK OF WOOL** is 22 stone; that is, 14 pounds to the stone, or 308 pounds.

**A BOLL OF WOOL** is the same weight.

**A PACK OF WOOL** is 17 stone 2 pounds: 240 pounds, a pack load for a horse.

**A TON OF WOOL** is 2 stone; that is 28 pounds, 6½ tods, 1 wey, and 2 weys a sack.

**A CLOVE OF WOOL** is 7 pounds, or half stone. Recollect, a stone is 14 pounds, when talking of wool feathers, &c.; but when applied to beef, fish and other meats, it is only 8 pounds.

**A TRUSS OF HAY**, new, 60 pounds, old, 56; of straw, 40 pounds. A load 36 trusses.

**A FIRKIN OF BUTTER** is 56 pounds; a tub, 84.

**A SCOTCH PINT** contains 105 cubic inches, and is equal to 4 English pints.

**A FARLOT OF WHEAT** is  $21\frac{1}{4}$  Scottish pints.

**TROY WEIGHT AND AVOIRDUPOIS WEIGHT.**—One hundred and forty-four pounds avoirdupois, are equal to 175 pounds Troy; 175 ounces Troy are equal to 192 ounces avoirdupois. All precious metals are bought and sold by Troy weight.

**THE KILO-GRAMME** of France is 1,000 grammes and equal to 2 pounds, 2 ounces, 4 grains, avoirdupois.

**A CHALDRON OF COAL**, is  $56\frac{3}{4}$  cubic feet, generally estimated 36 bushels. A bushel of anthracite coal weighs 80 pounds, which makes the weight of a chaldron, 2,880.

**WEIGHTS OF A CUBIC FOOT.**—Of sand or loose earth, 95 pounds; compact soil, 124; strong or clayey soil, 127; pure clay, 135; mixture of stones and clay, 160; masonry of stone, 205; brick, 125; cast iron, 450; steel, 489; copper, 486; lead, 709; silver, 654; gold, 1,203; platina, 1,218; glass, 180; water, 62; tallow, 59; cork, 15; oak timber, 73; mahogany, 66; air, 0.0753. In the above fractions are discarded.

**A BALE OF COTTON**, in Egypt, is 90 pounds; in America a commercial bale is 400 pounds, but is put up in different States, varying from 280 to 720 pounds. Sea Island Cotton is put up in sacks of 300 pounds.

**A BALE OF HAY**, is 300 pounds.

**A CORD OF WOOD**, is 128 solid feet, usually put up 8 feet long, 4 feet wide, and 4 high. In France, a cord of wood is 576 feet.

**A STACK OF WOOD**, is 108 solid feet; 12 feet long, 3 high, and 3 wide. A skid of wood is a round bundle of small sticks, 4 feet long, girding for a one-notch, 16 inches, two-notch, 23 inches; three-notch, 23 inches; four-notch, 33 inches; five-notch, 39 inches. A billet of wood is similar to a skid, being 3 feet long, 7, 16, and 14 inches round. They are sold by the score or hundred. A score is 20 in number.

**FAGGOTS** are bundles of brush 3 feet long and 2 feet round. A load of faggots is 50 such bundles. A *quintal* of wood is 100 pounds. All fuel should be sold by the pound.

**A PERCH OF STONE** is 25 cubic feet, piled, or 22 in the wall.

**LIME AND SAND** to a perch of stone. Three pecks of lime, and two-thirds of a one-horse cart load of sand.

**WEIGHT OF LIME.**—A bushel of limestone weighs 142 pounds; after it is burned if weighed directly from the kiln, 75 pounds; showing that 67 pounds of carbonic acid and water have been driven off by fire. This bushel of lime will absorb 20 pounds of water, gradually applied during several days, and will then be in a state of dry powder, weighing 93 pounds, showing that 18 pounds of water have been converted into a solid dry substance.