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 18½ in diameter. A box 12 inches square, with sides 7 3/5 ½ 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, Eng., 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 muddle is as 3.157. In Prussia, the *scheffel*, 1.479. In Poland, the *korsee*, 1 451. In Spain, the *fanega* 1 599; that is, 99 thousandths over a bushel and a half.

Barrel Measures—Rice, 600 pounds; flower 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, 2,249 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 fee; 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, 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 Tod 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 21¼ Scotish 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 58⅔ 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 in 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, girting for a one-notch, 16 inches, two notch, 23 inches; three-notch, 28 inches; four-notch, 33 inches; five-notch. 38 inches. A billet of wood is similar to a skid, being 3 feet long, 7, 10, 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.