WORTH REMEMBERING.

One bushel of coke weighs 32 pounds. One bushel of charcoal made from hard wood weighs about 30 pounds.

Bituminous coal averages in weight from 47 to 50, and from 40 to 45 cubic

feet in a ton.

One cubic foot of anthracite coal weighs from 53 to 55 pounds, and about 38 cubic feet in one ton.

The average quantity of coal burned per square foot of fire bar per hour in marine boilers is about 151/2 pounds.

For the circumference of a circle,

multiply diameter by 3.1416.

For the diameter of a circle, multiply

circumference by .31831.

For the area of a circle, multiply square of diameter by .7854.

For the side of an equal square, mul-

tiply diameter by .8862.

For the surface of a ball multiply square of diameter by 3.1416.

For the cubic inches in ball, multiply

cube of diameter by .5236.

To ascertain the safe working pressure on a boiler, multiply twice the thickness of the shell by the tensile strength, and divide the product by the diameter of the shell in inches.

To find out whether a plate is burned or crystallized, take a thin, sharp chisel and cut a thin chip for an inch or so; if the chip curls up the iron is

good.

To cut gaskets: In cutting rubber gaskets, etc., have a dish of water handy, and keep wetting the knife blade: it makes the work much easier.