The accompanying chart provides fast answers to many problems that may confront the pipe fitter. Procedures for using the chart are as follows:

Note that there are three sets of figures shown in connection with the extreme left-hand column **A**.

"Standard" gives the internal diameter of standard pipe (somewhat greater than 1" for 1 in. standard pipe).

"Exact" gives the exact diameter.

"Extra Heavy" gives the internal diameter of extra heavy pipe.

EXAMPLE:

How much water is passing through a pipe with parameters:

I.D. of exactly 1 in. Velocity of the water being 3 F.P.S.

To apply the chart to the problem locate 1 in. in column "A" using the scale "Exact" and run a straight line from the point through the 3 in column "C". From the intersection of this line with column "B". run a straight line horizontally to column "G". The intersection of this line at columns "D", "E" and "F" gives the following information:

"D" shows the cubic feet/minute flowing through the pipe.

"E" shows the volume of flow in gallons/minute

"F" gives the weight of the water in pounds/minute. (For liquids other tharn water. multiply the value of column "F" by the specific gravity of the liquid for accurate weight conversion.)

If a quantity in columns "**D**", "**E**" and "**F**" is known then velocity may be determined by reversing the procedure. Draw a horizontal line from the known point to column "**G**". From this intersection draw a line to the exact I.D. of the pipe in column "**A**" and extend this line to cross column "**C**". The intersection with column "**C**" gives the velocity in feet/second.

The chart can be used as a.conversion chart to determine the number of gallons in a certain number of cubic feet of liquid. The horizontal line already drawn to determine answers in columns "C" and "D" will provide the answer to the conversion in column "E".

A little practice will prove this chart to be a real time-saver.

