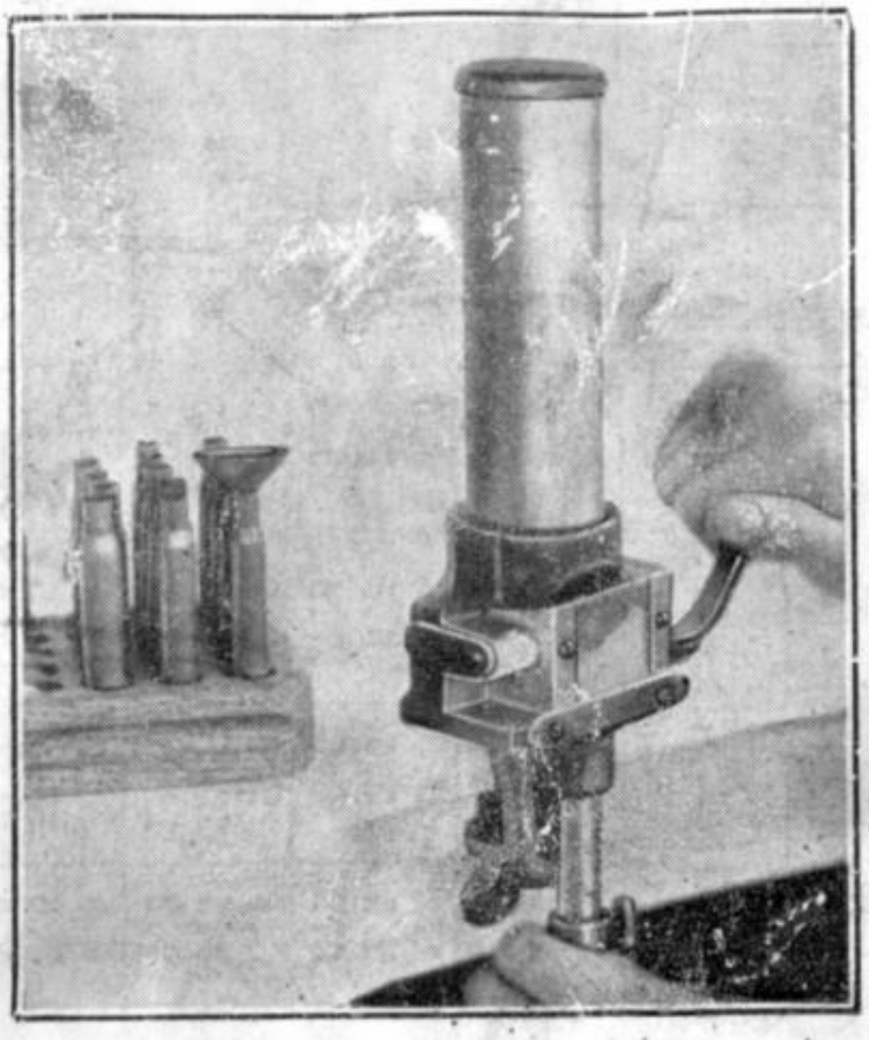
The B. & M. Visible Powder Measure



The B.&M. Visible Powder Measure

Due to its unique construction, the B. & M. Visible Powder Measure is by far the most accurate tool of its kind obtainable. Most powder measures of to-day have but one hopper which feeds directly into a measuring chamber, with the result that the height and density of the powder column in the hopper have a direct influence on the weight of the powder charge thrown. Thus a full hopper of powder throws a heavier charge than one a half or a third full. The B. & M. Visible Powder Measure overcomes this fault because the main hopper is not connected to the measuring chamber. The powder is fed from the main hopper into a secondary hopper or charger reservoir and from this into the measuring chamber. The charger reservoir is disconnected from the main hopper when it is connected to the measuring chamber. Thus the height of the powder in the main hopper has absolutely no effect on the weight of the charge thrown. This feature largely accounts for the remarkable accuracy of the B. & M. Visible Powder Measure. Successive charges thrown by it vary so slightly in weight that only by the most careful and tedious manipulation of a set of balances can the handloader obtain more uniform powder charges. It is the most accurate powder measure available.

The tool is designed to be clamped by means of a thumb screw to a shelf or work bench. The upper reservoir or main hopper may now be filled with powder to any desired height. As the main hopper is filled the powder runs down and nearly fills the charger reservoir which is equipped with a glass front through which the powder is clearly visible. The charge tube or measuring chamber is graduated in numbers from one to thirty-five and is easily adjusted by means of a thumb screw. The table on the next page is a table which lists all the powders available to the handloader and shows the weight in grains of the charge thrown by the measure for each kind of powder when the charge tube is set at any given graduation. Setting the charge tube at the proper graduation to throw a given charge of a certain powder requires but a few seconds. Measuring powder with the B. & M. Visible Powder Measure is equally simple. After the main powder hopper is filled and the charge tube properly set the latter is inserted in the measure as far as it will go and held in place as shown in the illustration. The lever handle is now firmly pushed to the right a full stroke, held there until the charge tube is filled, and then returned in a similar manner to its original position. The powder runs smoothly and evenly from the charger reservoir into the charge tube. The B. & M. Measure does not require and should not be pounded or hammered. The contents of the charge tube may now be funneled into a primed cartridge case. When the lever handle was moved forward the charger reservoir was first completely disconnected from the main hopper and then connected to the passage leading to the charge tube. The return stroke of the lever disconnected the charger reservoir from the charge tube and as the stroke was completed again connected the charger reservoir with the main hopper. Thus there is always a constant amount of powder in the charger reservoir when it is connected to the charge tube and the density of the powder column is the same for each successive charge. The glass front of the charger reservoir permits the operator actually to see the powder run into the charge tube, and if the charger reservoir does not refill when the lever is returned to its original position warns him that the main hopper is empty. When the charge tube is removed after the completion of the full stroke of the lever, the operator really sees the full and accurate charge before it is funneled into the cartridge case.

Note: For the benefit of those handloaders loading for the "Magnums" we have developed a Charge Tube Assembly longer than standard, with graduations to 50. These will contain up to approximately 80 grains for the powders commonly used in this caliber of firearm. Also used for measuring shot in sizes 6 and smaller for hand gun shot loads. It is available on request at a slight extra charge.

MICROMETER CHARGE TUBE

We have recently developed a micrometer type of Charge Tube for the B. & M. Visible Powder Measure. These can be set to any given graduation exactly. Using this type, the handloader records the settings used with his favorite loads and, whenever he desires to duplicate them, the slide may be set exactly to perform that function. They are also very conveniently set to points anywhere between the regular graduation numbers which appear on the slide. They are available in the regular and magnum sizes at a slight additional cost as shown on our latest price list.

They interchange with the regular type we have always supplied with the B. & M. Measure. If the owner of a B. & M. Measure purchased in the past wishes to add the micrometer feature to it, he needs only order the Micrometer Charge Tube.

The B. & M. Visible Powder Measure is so remarkably accurate that the purchase of an expensive set of balance scales is unnecessary. It is safe, reliable and convenient.

Every handloader should own one of these precision instruments.

Shipping weight, 3 pounds, 8 ounces.

CHECKING THE SLIDE SETTINGS OF THE B. & M. VISIBLE POWDER MEASURE

The accompanying table of "Slide Settings—B. & M. Visible Powder Measure" has been carefully compiled and verified by testing with current lots of powders in use at the time of issue and will be found sufficiently accurate as a guide for measuring powder charges for use in all low or medium power loads. However owing to the fact that the specific gravity of different lots of the same kind of powders varies slightly—a condition over which we have no control — the data contained herein cannot be guaranteed to be absolutely accurate. Of this feature, Wallace H. Coxe, Ballistic Engineer, of the E. I. DuPont de Nemours Company remarks:

"There has always been a slight variation in the relation of the bulk to the weight of all types of propellent powders. With black sporting powders and the obsolete type of 'bulk for bulk' smokeless powders, this difference ratio was less important than it is today.

"Modern smokeless powders are designed to produce more uniform results and this is better achieved by controlling the weight of charge rather than its bulk measurement. This practice has in turn reduced the variations that existed in bulk measurements but not entirely eliminated them. Hence, each successive lot of any particular kind of canister powder will perform as the previous lots when the same approximate **Weights** of charge are used. It is recommended, therefore, that after a shooter has learned to throw consistent weights of charge with his powder measure, he compares the actual weights of charge thrown at each setting of his powder measure. If he finds that the weighed charges do not check with the published table of approximate settings then he should make adjustments accordingly.

If the loader does not have an accurate balance of his own, the neighborhood druggist may be willing to help him.

From the foregoing, it will be noted that when the handloader desires to duplicate the ballistic properties of a load which he has developed and found satisfactory using a certain lot of a given kind of powder, it is advisable to check the slide setting of the B. & M. Visible Measure in order to obtain the same weight of charge when powder from another lot is used.

Note also, that when the loader is using a maximum or nearly maximum load of a given lot of powder, it may not be safe to use this slide setting when a new lot is to be used. Dangerous pressures can result from this practice. Verify the weight of charges thrown before loading high power loads from a new lot of powder. Once the correct setting is obtained, it will not be found necessary to check the weight of succeeding charges from that lot when the B.&M. Visible Powder Measure is used.

BELDING & MULL, PHILIPSBURG, PENNSYLVANIA

SLIDE SETTINGS — B. & M. VISIBLE POWDER MEASURE

Slide Setting	MILITARY SMOKELESS									"BULK" SMOKELESS					PISTOL			
	Hercules HiVel No. 2	30 Cal. IMR No. 4895	Hercules No. 2400	DuPont No. 3031	DuPont No. 4227	DuPont No. 4193	DuPont No. 4320	DuPont No. 4064	DuPont No. 4831	Hercules Unique	DuPont No. 4759	DuPont Bulk	DuPont MX	Hercules Red Dot	DuPont No. 5065	DuPont No. 6	Hercules Bullseye	Black Rifle Powder
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7	1.7	1.8	.....
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	2.8	.....	.....	.....	2.7	2.6	2.8	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.5	4.0	.....	.....	.....	3.7	3.5	3.7	.....
5	.....	.....	8.4	.....	7.4	.....	.....	.....	.....	4.5	5.4	3.4	4.7	4.0	4.8	4.5	4.6	.....
6	.....	.....	10.0	.....	9.0	.....	.....	.....	.....	5.5	6.5	4.1	5.6	4.8	5.7	5.5	5.7	.....
7	.....	.....	11.6	.....	10.7	.....	.....	.....	.....	6.5	7.7	4.8	6.5	5.6	6.7	6.5	6.7	.....
8	.....	.....	13.2	.....	12.3	.....	.....	.....	.....	7.5	8.7	5.5	7.5	6.5	7.6	7.3	7.7	.....
9	.....	.....	14.8	.....	14.0	.....	.....	.....	.....	8.5	9.9	6.2	8.5	7.4	8.6	8.1	8.7	.....
10	.....	15.7	16.3	15.5	15.6	14.6	16.6	15.0	15.5	9.5	11.1	6.8	9.5	8.2	9.5	9.1	.....	18.5
11	.....	17.4	17.9	16.9	17.1	16.1	18.3	16.7	17.2	10.5	12.3	7.5	10.5	9.1	10.5	10.0	.....	20.4
12	18.6	19.0	19.5	18.3	18.7	17.7	20.0	18.4	18.8	11.5	13.5	8.2	11.5	9.9	11.5	11.0	.....	22.3
13	20.3	20.7	21.1	19.8	20.3	19.3	21.8	20.1	20.5	12.5	14.6	8.9	12.5	10.7	12.4	12.0	.....	24.2
14	22.0	22.4	22.7	21.4	21.8	20.9	23.5	21.9	22.1	13.5	15.8	9.6	13.5	11.5	.....	13.0	.....	26.1
15	23.8	24.0	24.3	23.0	23.3	22.4	25.2	23.6	23.8	14.5	17.0	10.5	14.4	12.3	.....	14.0	.....	28.0
16	25.6	25.7	26.0	24.6	24.9	23.9	26.9	25.2	25.5	.....	18.3	11.2	15.4	13.1	.....	.....	.....	29.8
17	27.4	27.4	27.7	26.3	26.5	25.4	28.5	26.6	27.2	.....	19.6	11.9	16.4	13.9	.....	.....	.....	31.6
18	29.2	29.1	29.4	28.0	28.1	26.9	30.2	28.2	28.8	.....	20.9	12.6	17.4	14.7	.....	.....	.....	33.4
19	30.9	30.7	31.1	29.7	29.7	28.4	31.9	29.8	30.5	.....	22.0	13.4	18.4	15.5	.....	.....	.....	35.3
20	32.7	32.4	32.8	31.4	31.2	29.9	33.6	31.6	32.2	.....	23.0	14.2	19.4	16.3	.....	.....	.....	37.0
21	34.1	34.0	34.4	32.9	32.8	31.5	35.4	33.2	33.8	.....	23.3	14.9	20.4	17.1	.....	.....	.....	39.0
22	35.6	35.6	36.0	34.4	34.3	33.1	37.2	34.8	35.5	.....	24.6	15.6	21.4	17.9	.....	.....	.....	41.0
23	37.1	37.3	.....	36.0	35.9	34.6	38.9	36.4	37.2	.....	26.9	16.3	22.4	18.8	.....	.....	.....	43.0
24	38.6	38.9	.....	37.6	37.5	36.2	40.7	38.1	38.8	.....	28.2	17.0	23.4	19.7	.....	.....	.....	45.0
25	40.2	40.5	.....	39.2	39.0	37.8	42.4	39.7	40.5	.....	29.1	17.8	24.3	20.6	.....	.....	.....	47.0
26	41.9	42.2	.....	40.8	.....	39.3	43.7	41.4	42.2	.....	30.4	18.5	25.2	21.4	.....	.....	.....	49.0
27	43.6	43.9	.....	42.4	.....	40.9	45.4	43.0	43.8	.....	31.6	19.2	26.1	22.2	.....	.....	.....	51.0
28	45.3	45.6	.....	44.0	.....	42.5	47.1	44.7	45.5	.....	32.8	20.0	27.1	23.1	.....	.....	.....	53.0
29	47.0	47.3	.....	45.6	.....	44.1	48.9	46.3	47.1	.....	34.1	20.8	28.1	24.0	.....	.....	.....	55.0
30	48.7	49.0	.....	47.2	.....	45.7	51.0	47.9	48.8	.....	35.4	21.6	29.1	24.9	.....	.....	.....	57.0
31	50.3	50.7	.....	48.8	.....	47.2	52.8	49.5	50.5	.....	.....	22.3	30.1	25.7	.....	.....	.....	59.0
32	51.9	52.3	.....	50.4	.....	48.7	54.5	51.1	52.2	.....	.....	23.0	31.1	26.5	.....	.....	.....	61.0
33	53.5	54.0	.....	52.0	.....	50.2	56.2	52.7	53.8	.....	.....	23.7	32.2	27.3	.....	.....	.....	63.0
34	55.1	55.6	.....	53.6	.....	51.7	57.9	54.3	55.5	.....	.....	24.4	33.3	28.1	.....	.....	.....	65.0
35	56.7	57.3	.....	55.2	.....	53.2	59.5	55.9	57.2	.....	.....	25.2	34.4	28.8	.....	.....	.....	67.5
36	58.5	.....	.....	56.9	.....	.....	61.3	57.5	58.9	.....	.....	.....	35.4	29.6	.....	.....	.....	70.0
37	60.3	.....	.....	58.6	.....	.....	63.1	59.1	60.6	.....	.....	.....	36.4	30.4	.....	.....	.....	71.9
38	62.0	.....	.....	60.3	.....	.....	64.9	60.7	62.4	.....	.....	.....	37.4	31.2	.....	.....	.....	73.8
39	63.8	.....	.....	61.8	.....	.....	66.6	62.2	64.2	.....	.....	.....	38.4	32.1	.....	.....	.....	75.7
40	65.6	.....	.....	63.5	.....	.....	68.3	63.7	66.0	.....	.....	.....	39.3	33.0	.....	.....	.....	77.6
41	67.2	.....	.....	65.0	.....	.....	70.0	65.3	67.8	.....	.....	.....	.....	33.9	.....	.....	.....	79.6
42	68.9	.....	.....	66.4	.....	.....	71.7	66.9	69.3	.....	.....	.....	.....	34.8	.....	.....	.....	81.6
43	70.6	.....	.....	67.8	.....	.....	73.3	68.5	71.4	.....	.....	.....	.....	35.7	.....	.....	.....	83.6
44	72.2	.....	.....	69.2	.....	.....	74.9	70.1	73.2	.....	.....	.....	.....	36.6	.....	.....	.....	85.6
45	73.8	.....	.....	70.6	.....	.....	76.5	71.6	75.0	.....	.....	.....	.....	37.4	.....	.....	.....	87.5
46	75.5	.....	.....	72.1	.....	.....	78.3	73.3	76.7	.....	.....	.....	.....	.....	.....	.....	.....	89.4
47	77.2	.....	.....	73.6	.....	.....	80.1	75.0	78.4	.....	.....	.....	.....	.....	.....	.....	.....	91.3
48	78.9	.....	.....	75.1	.....	.....	81.9	76.6	80.1	.....	.....	.....	.....	.....	.....	.....	.....	93.3
49	80.6	.....	.....	76.6	.....	.....	83.7	78.2	81.7	.....	.....	.....	.....	.....	.....	.....	.....	95.3
50	82.2	.....	.....	78.2	.....	.....	85.5	79.8	83.4	.....	.....	.....	.....	.....	.....	.....	.....	97.3