- No. 1a. Weight per square yard, 8 oz.
Warp, wool, 40 lbs. tensile, per inch.
Filler, goats' hair, 28 lbs. tensile, per inch.
- No. 1b. Weight per square yard, 9 oz.
Warp, wool, 57 lbs. tensile, per inch.
Filler, goats' hair, 42 lbs. tensile, per inch.
- No. 2. Weight per square yard, 10 oz.
Warp, cotton, 89 lbs. tensile (one inch wide).
Filler, goats' hair, 69 lbs. tensile (one inch wide).
- No. 3a. Weight per square yard, 9 oz.
Warp, wool, 49 lbs. tensile (one inch).
Filler, human hair, 47 lbs. tensile (one inch).
- No. 3b. Weight per square yard, 6 oz.
Warp, wool, 44 lbs. tensile (one inch).
Filler, human hair, 30 lbs. tensile (one inch).
- No. 4. Weight per square yard, 15 oz.
Warp, human hair, 67 lbs. tensile (one inch).
Filler, human hair, 84 lbs. tensile (one inch).

CHAS. P. FOX.

KOENIG POTASH BULB.¹

There are five advantages which this bulb has over the other bulbs thus far in use:

First.—Accuracy in cleaning at each weighing. All parts are easily accessible.

Second.—Accuracy in quick absorption. The bubbles bursting rapidly will not drive liquid over into

the calcium chloride tube and as the gas is washed five times instead of three it allows of more rapid circulation.

Third.—Amount of condensation surface is much less in this bulb.

Fourth.—Center of gravity on balance pan at each weighing can be found quickly and correctly.

Fifth.—Saving of time can be seen from the above and better on trial. The simplicity of the exposed parts make it less easily broken.

Description.—The gas enters at tube marked "gas enters," passes into A, then into tube B, through it and out at bottom into bulb C, squeezing through contraction up into B again, up into E, then passing into tube F (which is fused open on outside of tube B and open on outside of bulb C), down through F and out into the bottle G,G,G, passing through solution, then up and out through tube H into the calcium chloride tube which it leaves at opening marked "gas exit."

The instrument holds nearly twice as much KOH solution as the Mohr bulb, therefore will act for twice as many combustions without refilling. It weighs not over twenty grams.

To fill the instrument a piece of rubber tube is attached at H and KOH solution sucked in at tube marked "gas enters." To empty, the liquid is forced out at tube marked "gas enters" by blowing at tube H.

W. A. KOENIG.

MIDVALE STEEL CO.,
PHILA.

FILTERING RACK.

As any sugar-house chemist knows, the first few drops of a filtering solution shall be rejected. Letting these, generally turbid drops, first fall into the jars, often makes it very difficult to obtain a perfectly clear solution. With my rack I thought to simplify

Fig. 1.

the operations by preventing these turbid drops from getting into the jars.

Photo No. 1 shows the front of the rack, a stand for the filtering jars and a board for the funnels.

Photo No. 2 shows the back. Directly under the funnel board is seen an inclined gutter of a grade of about 2 per cent.; under the lower end of this is placed a receptacle.

Fig. 2.