

tom were a plane. The interior diameter of each measure should be equal to the height from the centre of the bottom to the plane of the rim. The half bushel should have handles for the convenience of handling, but it will be better for the others not to have them, for the reasons mentioned in reference to the liquid measures. The thickness of the bottom, one-fifth of an inch, will be sufficient for these measures, as the comparisons can be made by *filling with small seed, rape seed^s is preferable, and "striking" it. The form proposed, it is believed, will be found to be preferable to that of shallower vessels, or even to any other. It is similar to the French dry measures. It is more convenient for striking and handling than a shallower measure. It is to be hoped that the introduction of this form will be a step towards the final abolition of the practice of heaping measures.

4. The *weights* should be of the same form and denominations as those furnished to the States, viz: 50 pounds weight, 25, 20, 10, 5, 4, 3, 2, 1 pounds avoirdupois, and 1 pound troy, avoirdupois ounce weights from 8 ounces to one ten thousandths of an ounce, and troy ounce weights from 10 ounces to one ten thousandth of an ounce; all to be made of brass, and the outside to be turned. The large weights from 50 pounds to 1 pound, and some of larger ounce weights may be cast hollow, and filled with lead to the proper weight, having a knob to be screwed in. This is for economy and the convenience of adjustment. The other ounce weights to be solid. The hundredths, thousandths, and ten thousandths of an ounce, may be made of silver or brass wire in the same manner as the United States ounce weights, the number of sides of the figure into which they are formed, denoting the weight, as a pentagon for *five* ten thousandths of an ounce, a quadrangle for *four* ten thousandths, a triangle for *three* ten thousandths, and an angle for *two* ten thousandths, and a small bar for *one* ten thousandth of an ounce. For the purpose of comparing the town standards with those of the county, two balances, or scales and beams, will be necessary, one for large weights from one to fifty pounds, the other for small weights less than a pound. A plain beam, with its knife edges resting on the projecting arm of a single cast-iron column, dishes with proper knife edge supports, an index on the base of the column, and a long index arm attached to the beam, will essentially complete the arrangement. The knife edges with their bearing points should be made with extreme care, to insure the requisite sensibility in balances for verifying standards. The other parts may receive more or less finish, according to the proposed expense. Designs for balances of the above description, suitable for counties, can be furnished, if desired, to the executives of States. The cost of a full set of weights and measures of the kinds described, exclusive of the balances, will come within the limits of one hundred and fifty and two hundred dollars. The Act of 1867, ch. 317, repeals and re-enacts sec. 20 of Art. 96² of the Code, but is scarcely a creditable piece of legislation. It provides that "the size and dimensions of the corn-barrel measure shall be as follows: twenty-one inches in diameter (clear of staves) at the bottom, (and twen-

[§]The seed of the garden cockscomb (*Celosia Cristata*) answers the purpose best, but requires to be cultivated in quantity for this particular use.

²Repealed. See note 1 *supra*.