$$S = E\,\frac{S\ (=\text{total cases.})}{N\ (=\text{true cases.})}$$

3. *The method of mean errors* consists in comparing two stimuli (weights, etc.) and judging them equal, then in taking their real difference, positive and negative, in a great number of cases, adding these differences without regard to signs, and dividing by the entire number of cases. The mean error is thus arrived at. The sensibility is inversely proportional to the mean error, *i.e.*,

$$S = \frac{1}{D}.\ (=\text{mean error.})$$

Proceeding by one or all of these methods, we establish the smallest perceptible difference of excitation for each of the senses. The following table gives these values as they are now established, subject to revision for certain classes of sensation, especially sight, when the conditions of experiment can be made more free from error:

SMALLEST PERCEPTIBLE DIFFERENCES.

Touch	1/3
Muscular Sense	1/17
Temperature	1/3
Sound	1/3
Light	1/100

The values given, it may be well to repeat, represent the amount of a given excitation which must be added to that excitation to be felt in consciousness. For example, if the eye is already stimulated by a light which represents 1,000 candles, at least 10 candles (a fractional increase of 1/100) must be added to produce any perceptible increase in the intensity of the light. Any number less than ten could have no effect on consciousness whatever. And so with the relative values given for the other senses.

Now to revert to the problem which originally concerned us,—it will be remembered that the two determinations already arrived at for all the senses are only steps in a process of measuring the intensity of sensations in terms of external stimuli. So far we have determined the smallest perceptible