lugs on the same drum bar is one. As an example, in table III there are three effective lugs in column 6, and one effective lug in column 3, giving a total of four. However, two of the effective lugs are on one bar which cancels the effect of one lug, yielding a result of only three. Hence, the proper total for columns 3 and 6 is three (two plus one), and not four.

e. Preparing Lug Setting Work Sheet. The effective lugs (represented by X's) are now entered on a work sheet similar to that shown in table III; lugs in the same column are placed on successive drum bars in as many cases as the overlap condition permits. The completed work sheet should be checked carefully for accuracy with the results of the previous steps. The two zero positions need not be shown on this chart.

f. Preparing Lug Setting Table. Convert the lug positions set up on the work sheet to the form illustrated in table II, page 15, by writing the numbered positions of the lugs opposite the number representing the drum bar. Determine the positions by referring to the number plate (29) at the rear of the drum bar cage.

g. Complete Preparation of Lug Setting. The following example serves to illustrate the preparation of a lug setting. The steps are numbered to correspond to the steps described in subparagraphs 2*a* to 2*d*.

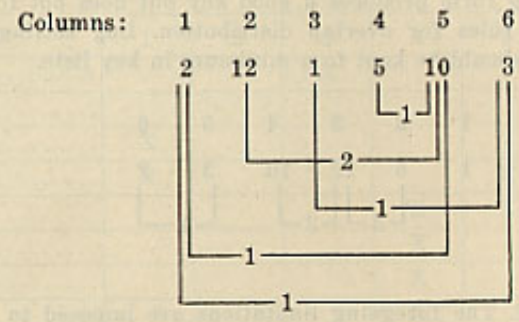
(1) Select a set of numbers from group A.

1, 2, 3, 5, 10, 12 Overlap=6

(2) Rearrange the numbers.

2, 12, 1, 5, 10, 3

(3) Distribute the overlaps.



(a) All of the six numbers are involved.

(b) Columns side by side: 4 and 5

Columns separated: 1 and 5; 1 and 6; 2 and 5; 3 and 6

(c) Small overlaps are used in preference to one large one.

(d) Overlaps involving only two numbers do not exceed four.

(4) All values from 1 to 27, inclusive, are obtained. For example:

1 is given by column 3.
2 is given by column 1.
3 is given by column 6.
4 is given by columns 1 and 6.
5 is given by column 4.
6 is given by columns 3 and 4, and so on.