June 27, 1933. K. JAGSCHITZ 1,916,051

METHOD OF CONSTRUCTING TELESCOPING GASOMETERS

Filed July 22, 1929

Fig. 1

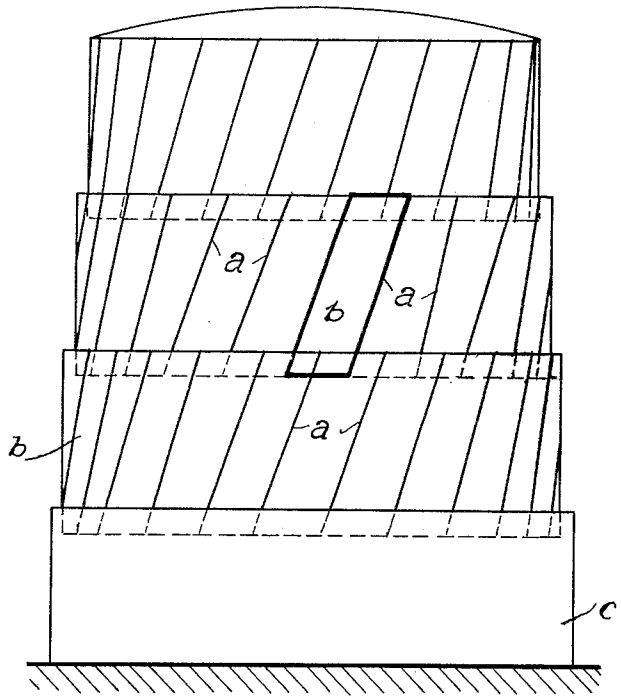
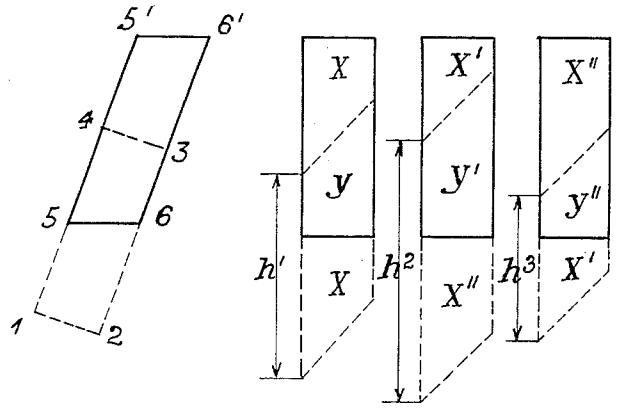


Fig. 2 *Fig. 3* *Fig. 4* *Fig. 5*



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UNITED STATES PATENT OFFICE

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METHOD OF CONSTRUCTING TELESCOPING GASOMETERS

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My invention relates to telescoping gasometers, and more particularly to telescoping gasometers of the spiral guide type. It is an object of the present invention to provide a method of constructing the several telescopic bells of the gasometer in a simple and economical manner with plates of rectangular cross-section, and of constructing gasometer sections of different heights with rectangular plates of uniform size.

In telescoping gasometers provided with spiral guiding means it is desirable that the rivetting of the plates of which the annular sections are composed follow the inclination of such guiding means, so that it is necessary that the rows of rivets run obliquely from top to bottom. The upwardly-extending edges of the plates must therefore be inclined to the vertical, and the blank plates must consequently be cut obliquely. This procedure, as heretofore practised, namely, by cutting away portions of the top and bottom of rectangular plates along lines oblique to the sides of the plates, resulted in a considerable waste of material which appeared to be unavoidable.

The present invention aims to provide a method whereby the rhomboidal plates of a spiral gasometer may be made from normal rectangular plates without loss of material. I accomplish such result by cutting such rectangular plates in two along an oblique line and uniting the two sections along their uncut edges which are opposite the cut edges, thereby producing a plate of rhomboidal form. By cutting the rectangular plates along oblique lines more or less distant from the centers of such plates and uniting the larger or smaller sections in suitable manner, I obtain rhomboidal plates of various heights or lengths from rectangular plates of uniform size.

In order that my invention may be better understood, reference is had to the accompanying drawing, in which Fig. 1 is a diagrammatic view in elevation of a telescopic gasometer composed of four sections and adapted to be guided spirally; and Figs. 2, 3, 4 and 5 illustrate several ways in which the invention may be carried out.

Referring to the drawing, the letter a indicates the fillets or ribs which serve for guiding the annular sections of the gasometer in their telescoping movements. Each pair of adjacent fillets bounds a surface of rhomboidal form, which corresponds to the shape of the plates of which the gasometer wall sections are composed. A rhomboidal plate b of this kind is shown in heavy lines in Fig. 1. It will be understood that in use the several bells of the gasometer move bodily vertically and in their collapsed condition are received within the stationary bottom annulus c.

Fig. 2 illustrates how, in accordance with the present invention, a rhomboidal plate for use in building up an annular gasometer section may be obtained from a normal rectangular plate. The original plate has the outline indicated by the numerals 1, 2, 3 and 4. This plate is cut along an oblique or inclined line 5, 6. The two halves 1, 5, 6, 2 and 5, 4, 3, 6, which are trapezoidal in configuration, are then arranged in the same plane with the perpendicular edges 1, 2 and 3, 4 in contact. These edges are then joined to each other, as by welding, the finished plate having the rhomboidal form indicated by the numerals 5, 6, 6′, 5′. As can be readily understood from the drawing, the rhomboidal plates required for the spirally guided gasometer may in this way be made from rectangular plates without any loss of material.

To obtain rhomboidal plates of various lengths from normal rectangular plates of uniform size, the oblique cut is made away from the middle of the plates, and the sections of different size so obtained are united in various ways. Figs. 3, 4 and 5 illustrate this procedure and the different sizes of rhomboidal plates obtained thereby. In all three figures the original rectangular plate is shown in full lines. In Fig. 3 the oblique cut is shown through the center of the plate, while in Figs. 4 and 5 the cut is made away from the center. By uniting the halves x and y of Fig. 3 in the manner described above, a rhomboidal plate of height h' is obtained. In Fig. 4 the section y' is shown joined to the larger section x'' of the plate of Fig. 5, whereby a rhomboidal plate of

height $h2$ results which is considerably greater than that shown in Fig. 3. By uniting the remaining parts y'' of Fig. 5 and x' of Fig. 4, a plate of height $h3$ is produced which is smaller than that of the rhomboidal plates shown in Figs. 3 and 4. All sizes of gasometer wall plates employed in practice can thus be made from uniform rectangular plates without alteration of the plates or of the cut sections thereof and without waste of material.

Variations may be resorted to within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. The method of constructing the annular sections of a telescoping gasometer of the spirally guided type, which comprises cutting rectangular plates along an oblique line so that each plate is divided into two non-rectangular parts, uniting the parts in pairs along the uncut edges thereof which are opposite the cut edges, whereby plates of rhomboidal configuration are produced, and then uniting said plates to form an annular gasometer section whose height is equal to the height of said plates and whose plates are curved spirally in correspondence with the spiral curve of the guideways of said gasometer.

2. The method of constructing the annular sections of a telescoping gasometer of the spirally guided type, which comprises cutting rectangular plates of uniform size along an oblique line removed from the gasometric center of such plates, so that each plate is divided into two unequal, non-rectangular parts, uniting the parts in pairs along the uncut edges thereof which are opposite the cut edges, whereby plates of rhomboidal configuration of the same height or of different heights are produced, and then uniting rhomboidal plates of equal height to form an annular gasometer section, or a plurality of gasometer sections of different heights, whose height is equal to the height of said plates and whose plates are curved spirally in correspondence with the spiral curve of the guideways of said gasometer.

Signed at Munich, Germany, this 11th day of July A. D. 1929.

KONRAD JAGSCHITZ.