United States Patent [19]

Scicchitano et al.

[11] **3,841,046**

[45] **Oct. 15, 1974**

[54] WALL FORM

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[22] Filed: **Feb. 21, 1973**

[21] Appl. No.: **334,486**

[52] **U.S. Cl.** **52/650,** 52/364, 52/665, 52/353

[51] **Int. Cl.** **E04h 12/12,** E04c 5/04

[58] **Field of Search** 52/348, 351, 353, 342, 52/364, 581, 650, 665, 564

[56] **References Cited**

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Primary Examiner—Alfred C. Perham
Attorney, Agent, or Firm—Buell, Blenko & Ziesenheim

[57] **ABSTRACT**

A wall form comprised of metal straps with the faces spaced apart by and affixed to horizontal spacers. The spacers have receptacles for receiving fasteners for metal lath or the like.

4 Claims, 6 Drawing Figures

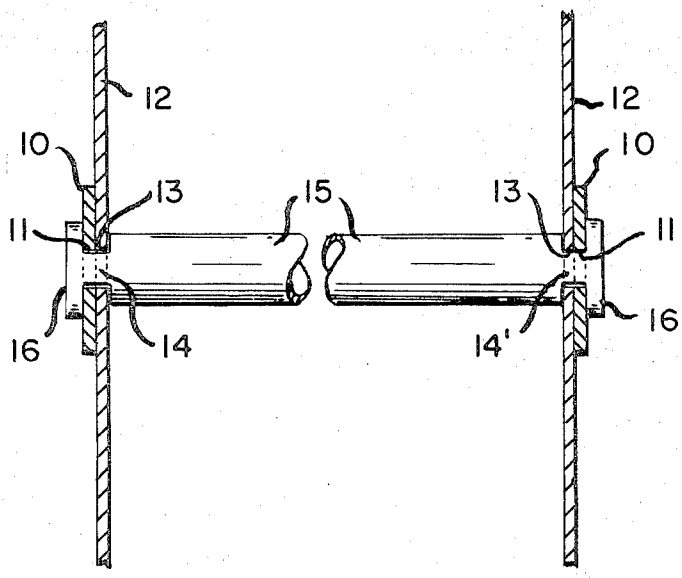


Fig. 1.

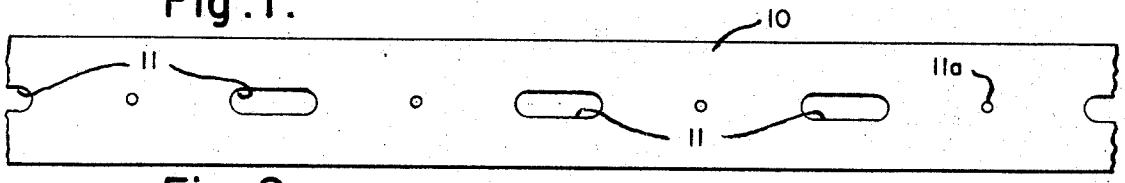


Fig. 2.

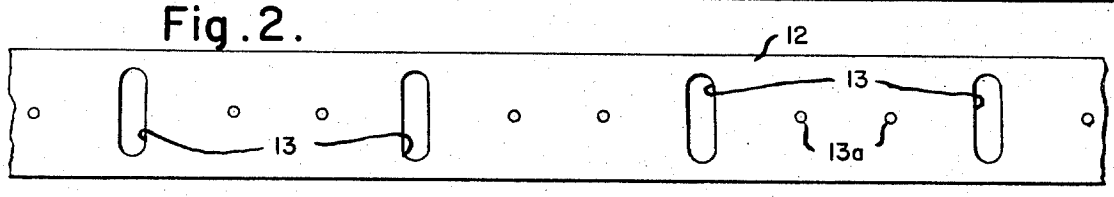


Fig. 3.

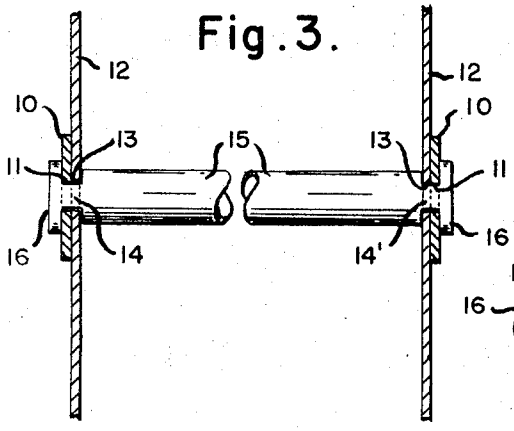


Fig. 5.

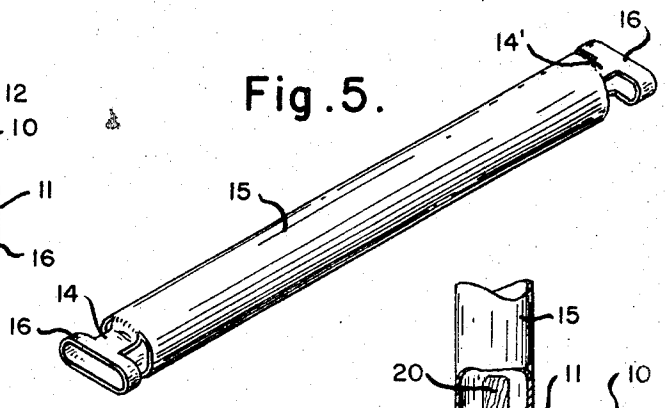
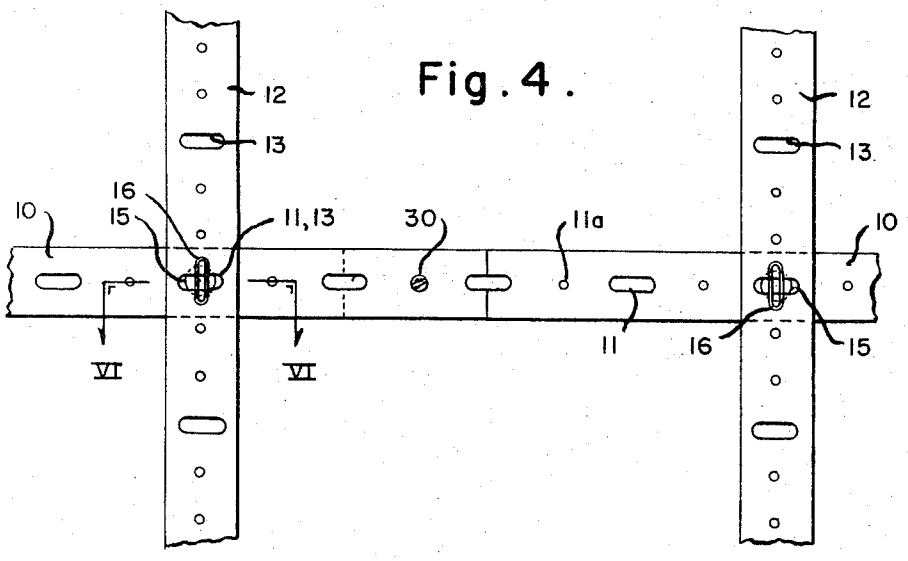


Fig. 6.

Fig. 4.



WALL FORM

This invention relates to a wall form structure and particularly to a form for building dividing walls, swimming pool walls, silo walls, retaining walls and like structures. The wall form of the present invention greatly reduces the cost of plaster or concrete walls and materially simplifies construction of such walls. Wall forms are old and well known in the art. The forms are generally constructed of wood and the construction requires the use of highly skilled labor, causing a resulting increase in the total cost of the walls and structure formed thereby. Equally significant is their high cost of removal and reinstallation. As a result of the high cost, plaster walls, for example, are seldom used as partitions or dividers in office buildings, although their superior sound absorbing qualities are well known.

The present invention provides a novel and significant improvement over the present method of construction of wall considering forms. The invention provides a wall form easily constructed by unskilled labor in a very short period of time. Construction of the wall forms requires only the use of the simpliest of tools and relatively inexpensive materials. In a preferred form of our invention we provide a plurality of elongated first metal straps having spaced non-circular openings, a plurality of elongated second metal straps having like noncircular openings in a direction transverse to that of the first strap and a plurality of spacers having non-circular end portions engaging said openings of the first and second straps to form a grid. In the foregoing general description, we have set out certain purposes, objects and advantages of our invention.

It will be described hereafter and will become apparent for those skilled in the art of the construction of wall forms when consideri g the following description in the drawings in which:

FIG. 1 is a plan view of a first elongated metal strap used in this invention;

FIG. 2 is a plan view of a second elongated metal strap used in this invention;

FIG. 3 is a cross-sectional view of a portion of the wall made according to this invention;

FIG. 4 is a plan view of a wall made according to this invention;

FIG. 5 is a perspective view of the horizontal spacers used in this invention; and

FIG. 6 is a sectional view on line V—V of FIG. 4.

Referring to the drawings, we have illustrated in FIG. 1, one form of an elongated metal strap for use in our invention. The form is made up of a strap **10** having spaced apart elongated openings **11** with the long axis of the opening parallel to the sides of the strap. In FIG. 2, we have illustrated a second form of elongated metal strap **12** with spaced apart elongated openings **13** with their long axis transverse to the sides of the strap. In each of straps **10** and **12** there are provided openings **11***a* and **13***a* between the slots **11** and **13** respectively. In FIG. 3, we have illustrated metal straps **12** in a vertical alignment affixed to horizontal straps **10** by a spacer member **15** having elongated flattened ends **16** with

parallel chordal flats **14** and **14'** diametrically opposed to each other or alternately by cicumferential grooves. Strap **12** is disposed vertically in relation to the floor and strap **10** is disposed horizontally in relation to the floor. FIG. 4 shows one face of the wall of FIG. 3 in which successive metal straps **10** are affixed to each other by means of screw **30** which is inserted in openings **11***a*. Metal straps **10** and **12** are affixed to spacers **15** by means of holes **11** and **13** engaging lands or grooves **14** and **14'**. The construction is then repeated until a wall frame of desired dimension is completed.

The horizontal spacers **15** (FIG. 5) are tubular members and may be made of steel or like metals. In each end of the horizontal spacer a wooden or plastic member **20** can be inserted.

Once both faces of the wall are completed by repeating the construction described above, metal lath is attached to the form by, for example, inserting nails through the lath into the wooden member **20** inserted into the spacers **15.** The gauge and strength of the metal straps, spacers and lath is determined by the type of wall that is being constructed. Once the metal lath has been attached to the wall form, plaster or concrete can then be applied to the lath in the well known manner.

Thus, a wall form is constructed inexpensively and quickly without the need of skilled workmen and special tools.

In the foregoing specification we have set out certain preferred embodiments of our invention, however, it will be understood that this invention may be otherwise embodied within the scope of the following claims.

We claim:

1. A wall form comprising, spaced grids each formed of a plurality of elongated first straps having spaced non-circular openings, a plurality of second elongated straps, said straps having spaced non-circular openings in a direction transverse to those of the first straps, said first plurality of straps being overlaid transversely across said second plurality of straps with their respective non-circular openings in alignment and a plurality of spacer members having non-circular end fastening portions, each of said non-circular end fastening portions passing through the non-circular openings of transversely overlaid elongated straps of each of said spaced grids and having a portion larger than the smallest dimension of the non-circular opening in each of said first and second straps which on rotation engages the overlaid straps of each grid to form a plurality of spaced grids.

2. The wall form means of claim **1** wherein the spacer means are adapted to receiver fasteners in the ends thereof.

3. The wall form means of claim **1** wherein the spacer means have groove means at the non-circular ends for receiving and the plurality thepluraity of metal straps on rotation of said spacers.

4. The wall form means as claimed in claim **1** wherein the elongated first and second straps are metal.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,841,046 Dated October 15, 1974

Inventor(s) Patsy A. Scicchitano et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 1, line 19, after "wall" delete --considering--.

Column 1, line 35, "consideri g" should read --considering--.

Column 1, line 50, "The" should read --This--.

Column 2, Claim 3, should read:

--The wall form means of claim 1 wherein the spacer means have groove means at the non-circular ends for receiving and retaining the plurality of metal straps on rotation of said spacers--.

Signed and sealed this 7th day of January 1975.

(SEAL)
Attest:

McCOY M. GIBSON JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents

FORM PO-1050 (10-69)

USCOMM-DC 60376-P69
* U.S. GOVERNMENT PRINTING OFFICE : 1969 O—366-334.