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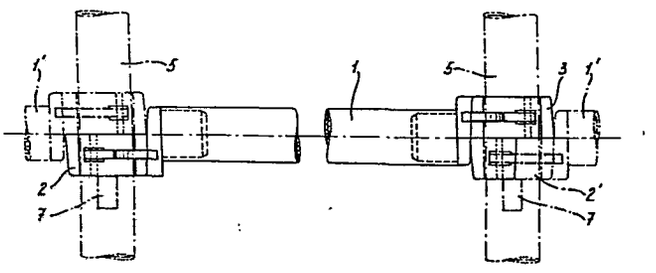
(54) **Railing for a scaffold construction.**

(57) Railing for a scaffold construction built up from a number of railing portions provided between the uprights (5) of the scaffold construction. Each railing portion comprises a tube (1) or rod having at each end a jaw (2, 3) fitting around an upright (5). Two jaws (3, 2) engaging around the same upright (5) seat on each other while the lower one (2') seats on a transverse member (7) on the upright (5). The jaws (2, 3) of each railing portion are offset in opposite direction with respect to the axis of the tube (1) or rod. Thereby, the lower surface of the one jaw (3) and the upper surface of the other jaw (2) lie in a flat plane through the axis of the tube (1).



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Railing for a scaffold construction.

The invention relates to a railing for a scaffold construction, which railing is built up from a number of railing portions between the uprights of the scaffold construction, in which each railing portion consists of a tube or rod having at each end a jaw fitting around an upright and the two jaws engaging around the same upright of two adjacent railing portions seat on each other and the lower one of the two jaws seats on a transverse member at the upright.

Such a railing is generally known in practise, in which the railing portions are implemented for example as struts shown in the Dutch Patent Application 72.04225.

It will be clear that when such a railing portion is fixed to the vertical uprights, each railing portion will lie higher or lower than both of the adjacent railing portions because of the height of the jaws, i.e. the tubes or rods of the railing portions are not in alignment, which is not only less fine aesthetically, but especially causes to vary the spacing between the railing and the platform for which the railing is intended. Said spacing is embedded within narrow limits in safety regulations.

The invention has the object to provide a railing, in which the tubes or rods of adjacent railing portions are in alignment.

According to the invention, this is achieved because the jaws of each railing portion are offset in opposite direction with respect to the axis of the tube or the rod such that the lower surface of the one jaw and the upper surface of the other jaw lie in one flat plane through the axis.

Two jaws engaging on the same upright seat now on each other also, but nevertheless the railing portions are completely in alignment.

In order to take care that the end portions of a railing extend horizontally as well, according to a further embodiment of the invention, the jaw the lower surface of which lies in said plane through the axis is provided with a projection facing downwards, of which the height is equal to the height of the other jaw.

In this way the jaw remains on the desired height even though the jaw positioned therebelow lacks. The lower edge of the projection

seats now on a step or another projection of the upright.

It is noted that railing portions in alignment are known per se from the Dutch Patent Application 72.12179. There, the railing portions are not provided with jaws engaging around the uprights. Said railing portions should be provided during the establishment of the scaffold construction and represent supporting parts of the construction.

The railing according to the invention is provided afterwards by snapping the jaws around the uprights. One can choose the height freely provided that the uprights are provided with projections or the like.

The invention will be explained by reference to the drawing in which:

Fig. 1 is a top view of a railing portion according to the invention in which the uprights of the scaffold construction are indicated by dash dot lines,

Fig. 2 is a side view of the railing portion according to Fig. 1 and of parts of adjacent railing portions and

Fig. 3 is an end view of the scaffold construction.

In known way, the railing portion according to the invention comprises a rod or tube 1 having at both of its ends a jaw 2 and 3 respectively. Said jaws 2 and 3 are provided with a semi circle-shaped aperture and a spring pawl 4.

The vertical uprights of the scaffold construction are indicated with 5. Said uprights 5 may form part of a ladder frame as shown in Fig. 3, or of a passing frame. The steps of said ladder frame are indicated with 6. In known way, ladder frames are arrangedd at the en of the scaffold construction. The intermediate passing frames do not comprise steps 6, because thereby, the passage would be obstructed.

Such frames are provided with not shown platforms in a known e way. At a predetermined level above each platform a railing should b provided. Usually, said railings are positioned at the inner side of the uprights 5 as it appears from Fig. 3. h

In order to provide a railing portion it is sufficiently to pus both of the jaws 2 and 3 on the uprights 5. Therey, the spring pawls 4 move outwards and prevent that the railing portion is retracted n again. In order to prevent the downwards sliding of a railing portio

along the uprights 5 the jaws seat on a horizontal projection. Such a projection is formed by a step 6 in a ladder frame and in a passing frame by a special stop 7 on the upright 5. Al this belongs to the prior art.

As it appears from Fig. 2 the jaws 2 and 3 are offset in opposite direction with respect to the axis of the tube or rod 1. The upper surface of the jaw 2 is at the same height as the lower surface of the jaw 3 and indeed at the height of the axis of the tube or rod 1. From Fig. 2 it is simply clear that in positioning the railing portions behind each other, the tubes or rods 1 are always in alignment.

The lower surface of the jaw 2 and the lower surface of the jaw 2' of the subsequent railing portion of which in Fig. 2 the tube or rod is indicated by 1', seats on projections 7.

It will be clear that at the end of the scaffold construction no further railing portion is provided, i.e. in Fig. 2 the jaw 2' lacks. In order to take care yet that the tube or rod 1 extends in horizontal direction, at the lower surface of the jaw 3 a projection 8 is provided the lower edge of which has the same level as the lower surface of the jaw 2'. By means of said projection 8 the jaw 3 seats on the step 6 of the ladder frame, see Fig. 3. So, also when the railing does not continue further, then also said latter railing portion extends horizontally.

It will be clear that the railing portion can be provided after establishing the scaffold construction.

C L A I M S.

1. A railing for a scaffold construction, which railing is built up from a number of railing portions between the uprights of the scaffold construction, in which each railing portion comprises a tube or rod having at each end a jaw fitting around an upright and the two jaws engaging around the same upright of two adjacent railing portions seat on each other and the lower of the two jaws seats on a transverse member at the upright, characterized in that the jaws of each railing portion are offset in opposite direction with respect to the axis of the tube or rod such that the lower surface of the one jaw and the upper surface of the other jaw lie in one flat plane through the axis.

2. Railing according to claim 1 characterized in that the jaw of which the lower surface lies in said plane is provided with a projection facing downwards and of which the height is equal to the height of the other jaw.

3. Railing portion intended for the railing according to claim 1 or 2 comprising a tube or rod having at each end a jaw, characterized in that the jaws are offset in opposite direction with respect to the axis of the tube or rod such that the lower surface of the one jaw and the upper surface of the other jaw lie in one flat plane through the axis.

4. Railing portion according to claim 3, characterized in that the jaw of which the lower surface lies in said plane is provided with a projection facing downwards and of which the height is equal to the height of the other jaw.

Fig-1

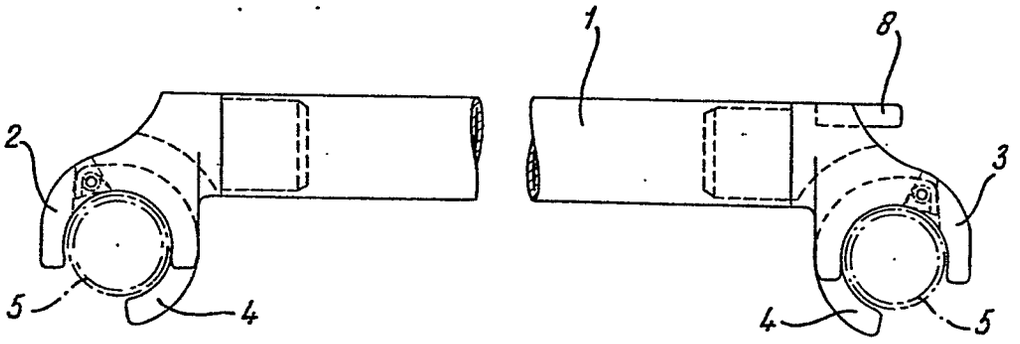


Fig-2

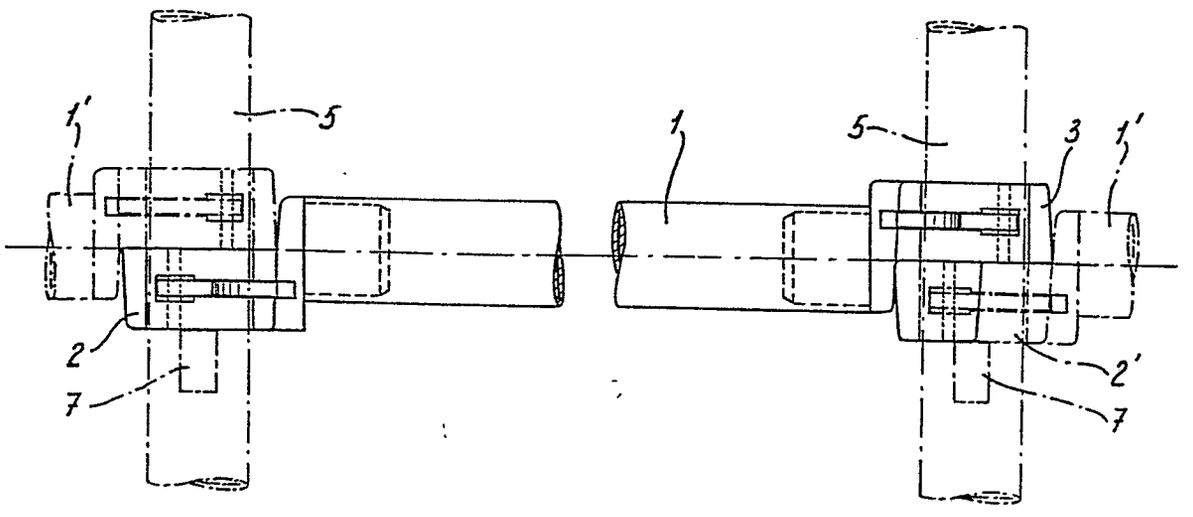
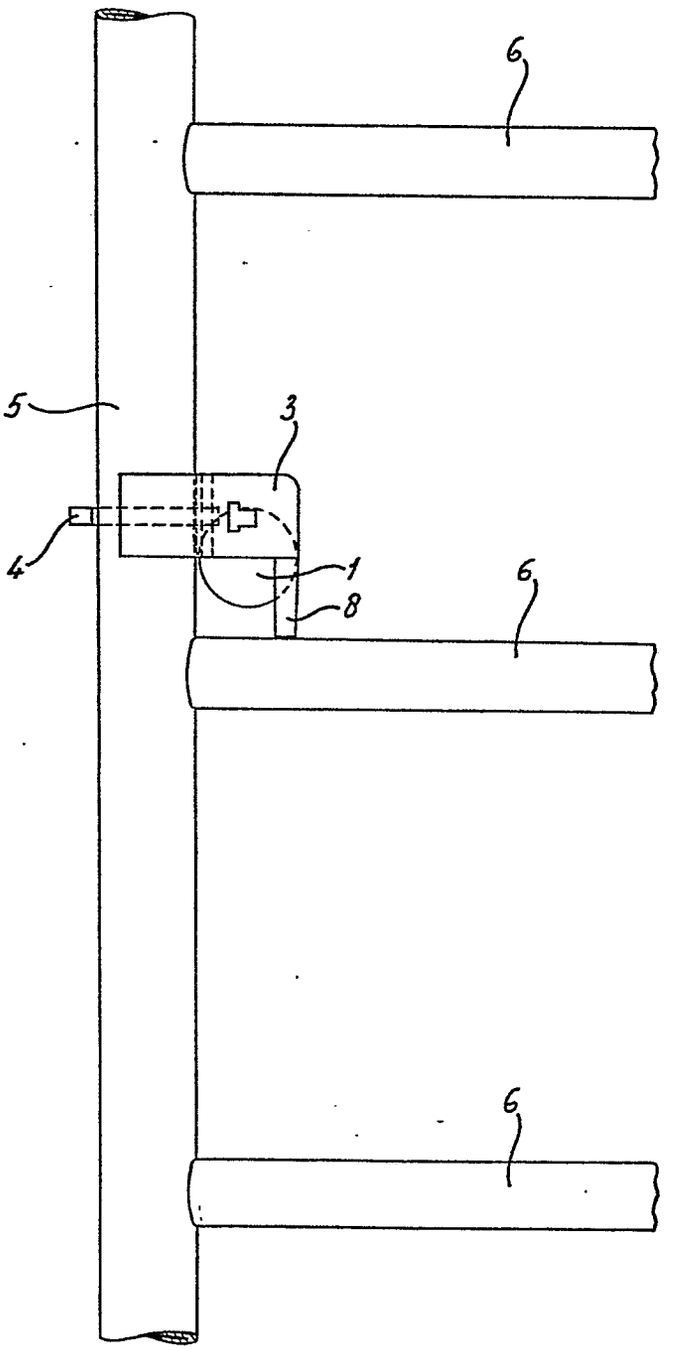


Fig-3



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EUROPEAN SEARCH REPORT

Application number EP 81 20 1326

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	DE - B - 1 267 823 (SOC. FRANCAISE DES ECHAFAUDAGES SELF-LOCK) * Column 3; column 4, lines 1-15; figures 1-5 *	1,3
A	FR - A - 2 451 431 (MARTINEZ) * Page 3, lines 1-14; figures 1,6 *	1,3
A	FR - A - 1 468 235 (ACCESS EQUIPMENT) * Page 1, column 2, last paragraph; page 2, column 1, paragraphs 1-3; figure 1 *	1,3

CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)

E 04 G 1/26

TECHNICAL FIELDS SEARCHED (Int.Cl. 3)

E 04 G

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
Y: particularly relevant if combined with another document of the same category
A: technological background
O: non-written disclosure
P: intermediate document
T: theory or principle underlying the invention
E: earlier patent document, but published on, or after the filing date
D: document cited in the application
L: document cited for other reasons

&: member of the same patent family, corresponding document

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	08-03-1982	VIJVERMAN