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European Patent Office
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⑪ Publication number:

0 053 860
B1

⑫

EUROPEAN PATENT SPECIFICATION

④⑤ Date of publication of patent specification: **30.05.84**

⑤① Int. Cl.³: **E 04 G 1/26**

②① Application number: **81201326.6**

②② Date of filing: **03.12.81**

⑤④ **Railing for a scaffold construction.**

③⑩ Priority: **04.12.80 NL 8006625**

④③ Date of publication of application:
16.06.82 Bulletin 82/24

④⑤ Publication of the grant of the patent:
30.05.84 Bulletin 84/22

⑧④ Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

⑤⑧ References cited:
DE-B-1 267 823
FR-A-1 468 235
FR-A-2 451 431

⑦⑧ Proprietor: **CENCLARK B.V.**
P.O. Box 93
NL-2380 AB Zoeterwoude (NL)

⑦② Inventor: **van Melle, Leendert**
Palestrinaweg 50
NL-2555 JZ The Hague (NL)
Inventor: **Brouwer, Christiaan**
Berberisstraat 89
NL-2565 WX The Hague (NL)
Inventor: **Nederlof, Adriaan**
Vinkenlaan 57
NL-2623 GH Delft (NL)

⑦④ Representative: **van der Beek, George Frans**
et al
Nederlandsch Octroobureau Johan de Wittlaan
15 P.O. Box 29720
NL-2502 LS Den Haag (NL)

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Description

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 of two adjacent railing portions engaging around the same upright seat on each other and the lower one of the two jaw 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. However, 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 arranged at the end 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 way. At a predetermined level above each platform a railing should be provided. Usually, said railings are positioned at the inner side of the uprights 5 as it appears from Fig. 3.

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

Claims

1. A railing member for a scaffold construction, which railing is built up from a number of railing portions between the uprights (5) of the scaffold construction, in which each railing portion comprises a tube or rod (1) having at each end a jaw (2, 3) fitting around an upright (5) and the two jaws (2', 3) of two adjacent railing portions engaging around the same upright (5) seat on each other and the lower (2') of the two jaws (2', 3) seats on a transverse member (7, 6) at the upright (5), characterized in that the jaws (2, 3) of each railing portion are offset in opposite direction with respect to the axis of the tube or rod (1) such that the lower surface of the one jaw (3) and the upper surface of the other jaw (2) lie in one flat plane through the axis.

2. Railing according to claim 1 characterized in that the jaw (3) of which the lower surface lies in said plane is provided with a projection (8) facing downwards and of which the height is equal to the height of the other jaw (2).

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

Patentansprüche

1. Eine Brüstung für ein Gerüst, die aus einer Anzahl von Brüstungsteilen zwischen den Ständern (5) des Gerüsts aufgebaut ist, wobei jedes Brüstungsteil ein Rohr oder einen Stab (1) aufweist, das oder der an jedem Ende einen sich um einen Ständer (5) legenden Haken (2, 3) aufweist, wobei die beiden Haken (2, 3) benachbarter Brüstungsteile (2', 3), die sich um denselben Ständer (5) legen, aufeinander sitzen und wobei der untere (2') der beiden Haken (2', 3) sich auf einem am Ständer (5) angebrachten Querteil (6, 7) abstützt, dadurch gekennzeichnet, daß die Haken (2, 3) jedes Brüstungsteiles im Bezug auf die Achse des Rohres oder des Stabes (1) in entgegengesetzten Richtungen so versetzt sind, daß die untere Oberfläche des

einen Hakens (3) und die obere Oberfläche des anderen Hakens (2) in einer Gemeinsamen Ebene durch diese Achse liegen.

2. Brüstung nach Anspruch 1, dadurch gekennzeichnet, daß der Haken (3), der mit seiner unteren Oberfläche in dieser Ebene liegt, mit einer Verlängerung (8) versehen ist, die sich nach unten erstreckt und deren Höhe gleich der Höhe des anderen Hakens (2) ist.

3. Brüstungsteil für eine Brüstung nach Anspruch 1 oder 2, mit einem an beiden Enden mit einem Haken versehenen Rohr oder Stab, dadurch gekennzeichnet, daß die Haken (2, 3) im Bezug auf die Achse des Rohres oder des Stabes (1) in entgegengesetzten Richtungen so versetzt sind, daß die untere Oberfläche des einen Hakens (3) und die obere Oberfläche des anderen Hakens (2) in einer gemeinsamen Ebene durch diese Achse liegen.

Revendications

1. Garde-corps pour échafaudages, ledit garde-corps étant formé d'un certain nombre de tronçon de garde-corps comprenant un tube ou tige (1) possédant à chaque extrémité une mâchoire (2, 3) s'engageant autour d'un montant (5) et les deux mâchoires (2', 3) de deux tronçons de garde-corps adjacents, engagées autour du même montant (5) étant en appui l'une sur l'autre et la mâchoire inférieure (2') des deux mâchoires (2', 3) étant en appui sur un élément transversal (7, 6) sur le montant (5), caractérisé par le fait que les mâchoires (2, 3) de chaque tronçon de garde-corps sont décalées en sens opposés par rapport à l'axe du tube ou de la tige (1) de manière telle que la surface inférieure d'une mâchoire (3) et la surface supérieure de l'autre mâchoire (2) se trouvent dans un plan passant par l'axe.

2. Garde-corps selon la revendication 1, caractérisé par le fait que la mâchoire (3) dont la surface inférieure se trouve dans ledit plan est munie d'une saillie (8) tournée vers le bas et dont la hauteur est égale à la hauteur de l'autre mâchoire (2).

3. Tronçon de garde-corps pour la réalisation du garde-corps selon les revendications 1 ou 2, comprenant un tube ou tige (1) possédant une mâchoire (2, 3) à chaque extrémité, caractérisé par le fait que les mâchoires (2, 3) sont décalées dans des sens opposés par rapport à l'axe du tube ou tige (1) de manière telle que la surface inférieure d'une mâchoire (3) et la surface supérieure de l'autre mâchoire (2) se trouvent dans un plan passant par l'axe.

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fig-1

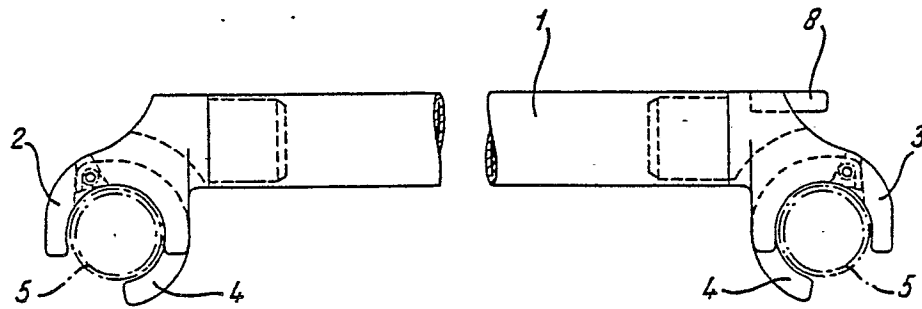


fig-2

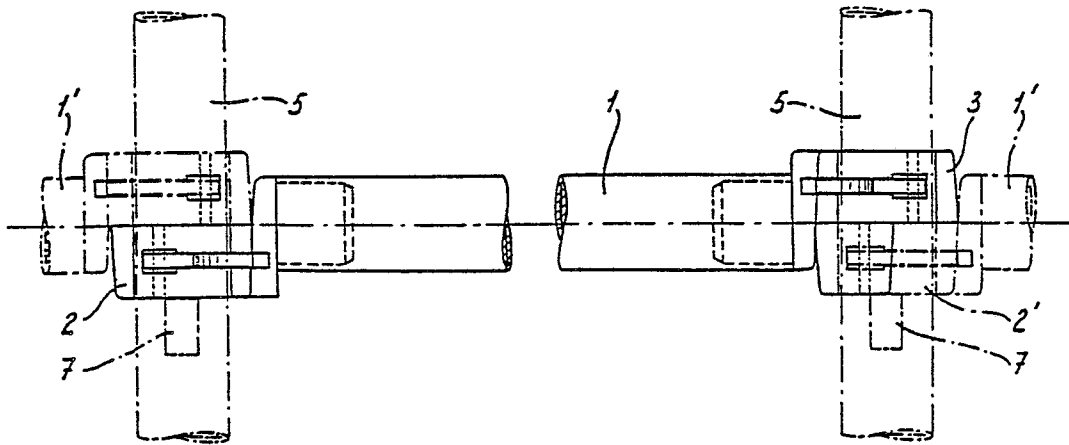


fig-3

