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(54) **TRUSS FOOTING CUTTING DEVICE**

VORRICHTUNG ZUM SCHNEIDEN VON GITTERFÜSSEN

DISPOSITIF DE DÉCOUPE DE PIED DE POUTRE

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Description

TECHNICAL FIELD

[0001] The present application relates to the field of truss processing techniques and, in particular, to a truss footing cutoff device.

BACKGROUND

[0002] The steel bar truss deck is formed by welding a bottom plate to a steel bar truss, and the steel bar truss is formed by welding an upper chord rib 101, a lower chord rib 102 and a truss footing 100 connecting the upper and lower chord ribs (shown in FIG. 1). The truss footing 100 is made of wave-shaped rebars. At present, the truss cutoff operation is involved in the truss production line, and typically, avoids the position of the truss footing. However, in the case where there exist special needs or the truss must be cut off from the position of the truss footing, the truss footing is usually cut off by manually using a toothless saw or the like. Such cutoff manner has some problems, for example, the length precision of the steel bar truss is difficult to control, and the production efficiency is low. Moreover, the labor intensity of the operator is too high, and there is a potential safety hazard.

SUMMARY

[0003] The present application provides a truss footing cutoff device to solve problems of low production efficiency and high labor intensity existing in the existing truss footing cutoff manner.

[0004] To achieve this object, the present application adopts technical solutions described below.

[0005] The truss footing cutoff device includes a rack; a fixed blade holder; two cutoff arms and a driving member.

[0006] The fixed blade holder is fixed on the rack. Two fixed blades are symmetrically arranged on the fixed blade holder, the fixed blade holder is configured to support a truss, and each of the two fixed blades is configured to support a truss footing of the truss.

[0007] The two cutoff arms are symmetrically arranged on the rack. Each of the two cutoff arms is provided with a movable blade.

[0008] The driving member is mounted on the rack and is configured to drive the two cutoff arms to move, so that the each of the two cutoff arms drives the movable blade to get close to a respective one of the two fixed blades, and the movable blade cooperates with the respective one of the two fixed blades to cut off the truss footing.

[0009] Optionally, the two cutoff arms are rotatably mounted on the rack, the driving member is capable of driving the two cutoff arms to rotate, and the movable blade is mounted at one end of the each of the two cutoff arms and is capable of being driven by the each of the two cutoff arms to rotate.

[0010] Optionally, the truss footing cutoff device further includes a transmission assembly. The transmission assembly includes a crankshaft rotatably mounted on the rack and two connecting arms mounted on the crankshaft and capable of only rotating relative to the crankshaft, each of the two connecting arms is rotatably connected to a respective one of the two cutoff arms, the driving member is drivingly connected to the crankshaft and is capable of driving the crankshaft to rotate, and the crankshaft is capable of driving the two connecting arms to stretch out and draw back synchronously when the crankshaft rotates.

[0011] Optionally, the crankshaft includes a first connecting part and a second connecting part, a central axis of the first connecting part and a central axis of the second connecting part are symmetrically arranged with respect to a centerline of the crankshaft, one of the two connecting arms is rotatably connected to the first connecting part and the other one of the two connecting arms is rotatably connected to the second connecting part.

[0012] Optionally, the transmission assembly further includes a connecting rod, one end of the connecting rod is rotatably connected to the each of the two connecting arms, and the other end of the connecting rod is rotatably connected to the respective one of the two cutoff arms.

[0013] Optionally, two driving members are provided, and each of the two driving members is drivingly connected to a respective one of the two cutoff arms.

[0014] Optionally, the two driving members synchronously operate so as to drive the two cutoff arms to synchronously rotate.

[0015] Optionally, the two cutoff arms are slidably mounted on the rack, the driving member is capable of driving the two cutoff arms to slide, and the movable blade is mounted at one end of the each of the two cutoff arms and is capable of being driven by the each of the two cutoff arms to move towards the fixed blade.

[0016] Optionally, the driving member is an air cylinder or an oil cylinder, and an output end of the air cylinder or the oil cylinder is connected to the two cutoff arms.

[0017] Optionally, the fixed blade holder includes a supporting part and two mounting parts located at two sides of the supporting part, the supporting part is configured to support the truss, and the two fixed blades are fixedly mounted on the two mounting parts respectively.

BRIEF DESCRIPTION OF DRAWINGS

[0018]

FIG. 1 is a structure view of a truss provided by the present application;

FIG. 2 is a front view of a truss footing cutoff device provided by the present application;

FIG. 3 is a side view of a truss footing cutoff device provided by the present application;

FIG. 4 is a structure view of a truss footing cutoff device, with a rack and a driving member hidden, provided by the present application; and

FIG. 5 is a structure view showing cooperation of a transmission member and a cutoff arm provided by the present application.

Reference list:

[0019]

- 1 rack
- 2 fixed blade holder
- 21 supporting part
- 22 mounting part
- 3 fixed blade
- 4 cutoff arm
- 5 moveable blade
- 6 driving member
- 7 transmission assembly
- 71 crankshaft
- 711 first connecting part
- 712 second connecting part
- 72 connecting arm
- 73 connecting rod
- 10 truss
- 100 truss footing
- 101 upper chord rib
- 102 lower chord rib

DETAILED DESCRIPTION

[0020] The present application is further described hereinafter in detail in conjunction with drawings and embodiments. It is to be understood that the embodiments described herein are intended to explain the present application and not to limit the present application. Additionally, it is to be noted that for ease of description, only part, not all, of the structures related to the present application are illustrated in the drawings.

[0021] In the description of the present application, unless otherwise expressly specified and limited, the term "connected to each other", "connected" or "secured" is to be construed in a broad sense, for example, as securely connected, detachably connected or integrated; mechanically connected or electrically connected; directly connected to each other or indirectly connected to each other via an intermediary; or internally connected between two components or interaction relations between two components. For those of ordinary skill in the art, specific meanings of the preceding terms in the present application may be understood based on specific situations.

[0022] In the present application, unless otherwise expressly specified and limited, when a first feature is described as "above" or "below" a second feature, the first feature and the second feature may be in direct contact or be in contact via another feature between the two features. Moreover, when the first feature is described as "on", "above", or "over" the second feature, the first feature is right on, above, or over the second feature or the first feature is obliquely on, above, or over the second feature, or the first feature is simply at a higher level than the second feature. When the first feature is described as "under", "below", or "underneath" the second feature, the first feature is right under, below, or underneath the second feature or the first feature is obliquely under, below, or underneath the second feature, or the first feature is simply at a lower level than the second feature.

[0023] In the description of this embodiment, the orientation or position relationships indicated by terms "above", "below", "right" and the like are based on the orientation or position relationships shown in the drawings, merely for ease of description and simplifying an operation, and these relationships do not indicate or imply that the referred device or element has a specific orientation and is constructed and operated in a specific orientation, and thus it is not to be construed as limiting the present application. In addition, the terms "first" and "second" are used only to distinguish between descriptions and have no special meaning.

[0024] The present application provides a truss footing cutoff device, which can achieve the automatic cutoff of a truss footing 100 of a truss 10 without the manual cutoff, and thus has a higher automation degree, improves the production efficiency, and reduces the labor intensity of the operator and the potential safety hazard.

[0025] As shown in FIGS. 2 to 5, the truss footing cutoff device includes a rack 1, a fixed blade holder 2, a fixed blade 3, a cutoff arm 4, a movable blade 5, a driving member 6 and a transmission assembly 7.

[0026] The rack 1 is configured to carry the fixed blade holder 2, the fixed blade 3, the cutoff arm 4, the movable blade 5, the driving member 6 and the transmission assembly 7 to achieve the cutoff operation of the truss footing 100.

[0027] The fixed blade holder 2 is fixed to the rack 1 and

is optionally placed at a top position of the rack 1. A shape of the fixed blade holder 2 is adapted to a shape of the truss 10. As shown in FIGS. 2 and 4, the fixed blade holder 2 includes a supporting part 21 and mounting parts 22 located at two sides of the supporting part 21. The supporting part 21 is substantially in an inverted trapezoidal structure, and the truss 10 can be placed on and supported by the support part 21. The mounting part 22 is configured to fix and mount the fixed blade 3, and when the truss 10 is placed on the support part 21, the truss footing 100 can be placed on the fixed blade 3.

[0028] The cutoff arm 4 is mounted on the rack 1 and is rotatable relative to the rack 1. As shown in FIG. 4, an upper-middle position of the cutoff arm 4 is rotatably connected to the rack 1 through a rotary shaft. The movable blade 5 is mounted at one end of the cutoff arm 4 close to the rotary shaft, and the movable blade 5 can get close to or move away from the fixed blade 3 with the rotation of the cutoff arm 4. When the cutoff arm 4 drives the movable blade 5 to get close to the fixed blade 3, the movable blade 5 and the fixed blade 3 cooperate to cut the truss footing 100.

[0029] Exemplarily, in this embodiment, two cutoff arms 4 are symmetrically arranged on the rack 1, and correspondingly, two movable blades 5 and two fixed blades 3 are also symmetrically arranged, thereby achieving the cutoff of truss footings 100 on two sides of the truss 10.

[0030] The driving member 6 is configured to drive the cutoff arm 4 to rotate relative to the rack 1. The driving member 6 may be a motor or a deceleration motor. Two driving members 6 may be provided, where each driving member 6 drives one cutoff arm 4 to rotate so as to cut off the truss footing 100. Optionally, the two driving members 6 synchronously operate to synchronously cut off the truss footings 100 on two sides of the truss 10 at a same position, thereby improving the cutoff efficiency.

[0031] Considering the production cost, in this embodiment, only one driving member 6 may be provided, and in this case, the driving member 6 drives the cutoff arms 4 to rotate through the transmission assembly 7. Referring to FIGS. 2 and 5, the above transmission assembly 7 includes a crankshaft 71, connecting arms 72 and connecting rods 73.

[0032] The crankshaft 71 is rotatably mounted on the rack 1 and can be driven by the driving member 6 to rotate. The crankshaft 71 is provided with a first connecting part 711 and a second connecting part 712. One connecting arm 72 is rotatably connected to the first connecting part 711 and the other connecting arm 72 is rotatably connected to the second connecting part 712. One end of each connecting arm 72 is rotatably connected to one end of a respective connecting rod 73, the other end of the respective connecting rod 73 is rotatably connected to one cutoff arm 4. In this way, when the connecting arm 72 is driven by the crankshaft 71 to stretch out or draw back, the connecting arm 72 can drive the cutoff arm 4 to rotate, and then the cutoff arm 4 drives

the movable knife 5 to get close to or move away from the fixed blade 3.

[0033] Exemplarily, a central axis of the first connecting part 711 and a central axis of the first connecting part 712 are symmetrically arranged with respect to a centerline of the crankshaft 71. The central axis of the first connecting part 711 and the central axis of the second connecting part 712 are symmetrically arranged with respect to the centerline of the crankshaft 71 so that when the crankshaft 71 rotates, the two connecting arms 72 can be driven to stretch out at the same time and then the two cutoff arms 4 and the two movable blades 5 can be driven to get close to the fixed blades 3 at the same time, so as to achieve the synchronous cutoff of the truss footings 100 on two sides of the truss 10; or the two connecting arms 72 can be driven to draw back at the same time and then the two cutoff arms 4 and the two movable blades 5 can be driven to move away from the fixed blades 3 at the same time.

[0034] When the truss footing cutoff device in this embodiment works, first, the truss 10 is placed on the supporting part 21 of the fixed blade holder 2, and the truss footing 100 is located on the fixed blade 3; then, the crankshaft 71 is driven by the driving member 6 to rotate, the crankshaft 71 drives the two connecting arms 72 to stretch out, and each connecting arm 72 drives the respective cutoff arm 4 to rotate, and the rotation of the cutoff arm 4 drives the movable blade 5 to get close to the fixed blade 3; and finally the movable blade 5 cooperates with the fixed blade 3 to cut off the truss footing 100.

[0035] After the truss footing 100 is cut off, the truss 10 continues to be transported backward to a truss shearing device, and an upper chord rib and a lower chord rib of the truss 10 are cut off by the truss shearing device, thereby completing the cutoff of the whole truss 10.

Embodiment two

[0036] This embodiment provides a truss footing cutoff device. The difference between this embodiment and embodiment one is that in this embodiment, the cutoff arm is not rotatably arranged on the rack, but is slidably arranged on the rack; the driving member is configured to drive the cutoff arm to slide; and the transmission component is not provided.

[0037] Optionally, a slide rail may be provided on the rack, and correspondingly, a slide block is provided on the cutoff arm. The driving member drives the cutoff arm to slide in a vertical direction, and the slide block and the slide rail can play roles of guiding and stably supporting.

[0038] At the same time, the driving member of this embodiment may be an air cylinder or an oil cylinder, and an output end of the air cylinder or the oil cylinder is connected to the cutoff arm. Two driving members may be provided. Each driving member is drivingly connected to one cutoff arm, and optionally, the two driving members synchronously operate so as to achieve the synchronous sliding of the cutoff arms. One driving member may also

be provided, and in this case, a connection member needs to be provided. Two cutoff arms are fixedly connected through the connection member, an output end of the driving member is fixedly connected to the connection member, the connection member is driven by the driving member to move, and then the connection member can drive the two cutoff arms to slide at the same time.

[0039] The remaining structure of this embodiment is the same as the structure of the embodiment one, and will not be repeated here.

[0040] When the truss footing cutoff device in this embodiment works, first, the truss is placed on the supporting part of the fixed blade holder, and the truss footing is located on the fixed blade 3; then, the cutoff arm is driven by the driving member to slide downwards, and the movable blade on the cutoff arm is driven to get close to the fixed blade, and finally cooperates with the fixed blade to cut off the truss footing.

[0041] When the truss footing is cut off, the truss continues to be transported backward to a truss shearing device, and an upper chord rib and a lower chord rib of the truss are cut off on the truss shearing device, thereby completing the cutoff of the whole truss.

[0042] In the present application, the movable blade 5 is driven by the cutoff arm to get close to the fixed blade 3, and then the movable blade 5 cooperates with the fixed blade 3 to cut off the truss footing 100. Thus, the automatic cutoff of the truss footing 100 of the truss 10 is achieved without the manual cutoff, having a higher automation degree, improving the production efficiency, and reducing the labor intensity of the operator and the potential safety hazard.

Claims

1. A truss footing cutoff device, comprising:

a rack (1);
 a fixed blade holder (2) fixed on the rack (1), wherein two fixed blades (3) are symmetrically arranged on the fixed blade holder (2), the fixed blade holder (2) is configured to support a truss (10), and each of the two fixed blades (3) is configured to support a truss footing (100) of the truss (10);
 two cutoff arms (4) symmetrically mounted on the rack (1), wherein each of the two cutoff arms (4) is provided with a movable blade (5); and
 a driving member (6) mounted on the rack (1) and configured to drive the two cutoff arms (4) to move, so that the each of the two cutoff arms (4) drives the movable blade (5) to get close to a respective one of the two fixed blades (3), and the movable blade (5) cooperates with the respective one of the two fixed blades (3) to cut off the truss footing (100).

2. The truss footing cutoff device of claim 1, wherein the two cutoff arms (4) are rotatably mounted on the rack (1), the driving member (6) is capable of driving the two cutoff arms (4) to rotate, and the movable blade (5) is mounted at one end of the each of the two cutoff arms (4) and is capable of being driven by the each of the two cutoff arms (4) to rotate.

3. The truss footing cutoff device of claim 2, further comprising: a transmission assembly (7), wherein the transmission assembly (7) comprises a crankshaft (71) rotatably mounted on the rack (1) and two connecting arms (72) mounted on the crankshaft (71) and capable of only rotating relative to the crankshaft (71), each of the two connecting arms (72) is rotatably connected to a respective one of the two cutoff arms (4), the driving member (6) is drivingly connected to the crankshaft (71) and is capable of driving the crankshaft (71) to rotate, and the crankshaft (71) is capable of driving the two connecting arms (72) to stretch out and draw back synchronously when the crankshaft (71) rotates.

4. The truss footing cutoff device of claim 3, wherein the crankshaft (71) comprises a first connecting part (711) and a second connecting part (712), a central axis of the first connecting part (711) and a central axis of the second connecting part (712) are symmetrically arranged with respect to a centerline of the crankshaft (71), one of the two connecting arms (72) is rotatably connected to the first connecting part (711) and the other one of the two connecting arms (72) is rotatably connected to the second connecting part (712).

5. The truss footing cutoff device of claim 3 or 4, wherein the transmission assembly (7) further comprises a connecting rod (73), one end of the connecting rod (73) is rotatably connected to the each of the two connecting arms (72), and the other end of the connecting rod (73) is rotatably connected to the respective one of the two cutoff arms (4).

6. The truss footing cutoff device of claim 2 or 5, wherein two driving members (6) are provided, and each of the two driving members (6) is drivingly connected to a respective one of the two cutoff arms (4).

7. The truss footing cutoff device of claim 6, wherein the two driving members (6) synchronously operate so as to drive the two cutoff arms (4) to synchronously rotate.

8. The truss footing cutoff device of claim 1, wherein the two cutoff arms (4) are slidably mounted on the rack (1), the driving member (6) is capable of driving the two cutoff arms (4) to slide, and the movable blade (5) is mounted at one end of the each of the two cutoff

arms (4) and is capable of being driven by the each of the two cutoff arms (4) to move towards the fixed blade (3).

9. The truss footing cutoff device of claim 8, wherein the driving member (6) is an air cylinder or an oil cylinder, and an output end of the air cylinder or the oil cylinder is connected to the two cutoff arms (4).
10. The truss footing cutoff device of claim 1, wherein the fixed blade holder (2) comprises a supporting part (21) and two mounting parts (22) located at two sides of the supporting part (21), the supporting part (21) is configured to support the truss (10), and the two fixed blades (3) are fixedly mounted on the two mounting parts (22) respectively.

Patentansprüche

1. Fachwerkfuß-Abschneidvorrichtung, umfassend:

ein Gestell (1);
einen festen Klingenhalter (2), der am Gestell (1) befestigt ist, wobei zwei feste Klingen (3) symmetrisch auf dem festen Klingenhalter (2) angeordnet sind, wobei der feste Klingenhalter (2) dazu ausgelegt ist, ein Fachwerk (10) zu stützen, und wobei jede der beiden festen Klingen (3) dazu ausgelegt ist, einen Fachwerkfuß (100) des Fachwerks (10) zu stützen;
zwei Abschneidarme (4), die symmetrisch am Gestell (1) montiert sind, wobei jeder der beiden Abschneidarme (4) mit einer beweglichen Klinge (5) ausgestattet ist; und
ein Antriebselement (6), das am Gestell (1) montiert ist und dazu ausgelegt ist, die beiden Abschneidarme (4) zum Bewegen anzutreiben, sodass jeder der beiden Abschneidarme (4) die bewegliche Klinge (5) dazu antreibt, sich einer jeweiligen der beiden festen Klingen (3) zu nähern, wobei die bewegliche Klinge (5) mit der jeweiligen der beiden festen Klingen (3) zusammenwirkt, um den Fachwerkfuß (100) abzuschneiden.

2. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 1, wobei die beiden Abschneidarme (4) drehbar am Gestell (1) montiert sind, wobei das Antriebselement (6) in der Lage ist, die beiden Abschneidarme (4) zum Drehen anzutreiben, und wobei die bewegliche Klinge (5) an einem Ende jedes der beiden Abschneidarme (4) montiert ist und in der Lage ist, durch jeden der beiden Abschneidarme (4) zum Drehen angetrieben zu werden.
3. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 2, weiter umfassend: ein Getriebe (7), wobei das

Getriebe (7) eine Kurbelwelle (71), die drehbar am Gestell (1) montiert ist, und zwei Verbindungsarme (72), die an der Kurbelwelle (71) montiert sind und nur relativ zur Kurbelwelle (71) drehbar sind, umfasst, wobei jeder der beiden Verbindungsarme (72) drehbar mit einem jeweiligen der beiden Abschneidarme (4) verbunden ist, wobei das Antriebselement (6) antriebsmäßig mit der Kurbelwelle (71) verbunden ist und in der Lage ist, die Kurbelwelle (71) zum Drehen anzutreiben, und wobei die Kurbelwelle (71) in der Lage ist, die beiden Verbindungsarme (72) anzutreiben, sodass sie synchron ausfahren und einfahren, wenn die Kurbelwelle (71) gedreht wird.

4. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 3, wobei die Kurbelwelle (71) einen ersten Verbindungsteil (711) und einen zweiten Verbindungsteil (712) umfasst, wobei eine Mittelachse des ersten Verbindungsteils (711) und eine Mittelachse des zweiten Verbindungsteils (712) symmetrisch zu einer Mittellinie der Kurbelwelle (71) angeordnet sind, wobei einer der beiden Verbindungsarme (72) drehbar mit dem ersten Verbindungsteil (711) verbunden ist und der andere der beiden Verbindungsarme (72) drehbar mit dem zweiten Verbindungsteil (712) verbunden ist.

5. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 3 oder 4, wobei das Getriebe (7) weiterhin eine Verbindungsstange (73) umfasst, wobei ein Ende der Verbindungsstange (73) drehbar mit jedem der beiden Verbindungsarme (72) verbunden ist und das andere Ende der Verbindungsstange (73) drehbar mit dem jeweiligen der beiden Abschneidarme (4) verbunden ist.

6. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 2 oder 5, wobei zwei Antriebselemente (6) vorgesehen sind, wobei jedes der beiden Antriebselemente (6) antriebsmäßig mit einem jeweiligen der beiden Abschneidarme (4) verbunden ist.

7. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 6, wobei die beiden Antriebselemente (6) synchron arbeiten, um die beiden Abschneidarme (4) anzutreiben, sodass sie sich synchron drehen.

8. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 1, wobei die beiden Abschneidarme (4) gleitbar am Gestell (1) montiert sind, wobei das Antriebselement (6) in der Lage ist, die beiden Abschneidarme (4) zum Gleiten anzutreiben, und wobei die bewegliche Klinge (5) an einem Ende jedes der beiden Abschneidarme (4) montiert ist und in der Lage ist, durch jeden der beiden Abschneidarme (4) zum Bewegen in Richtung der festen Klinge (3) angetrieben zu werden.

9. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 8, wobei das Antriebselement (6) ein Luftzylinder oder ein Ölzylinder ist, wobei ein Ausgangsende des Luftzylinders oder des Ölzylinders mit den beiden Abschneidarmen (4) verbunden ist. 5
10. Fachwerkfuß-Abschneidvorrichtung nach Anspruch 1, wobei der feste Klingenhalter (2) einen Stützteil (21) und zwei Montageteile (22), die sich an beiden Seiten des Stützteils (21) befinden, umfasst, wobei der Stützteil (21) dazu ausgelegt ist, das Fachwerk (10) zu stützen, und wobei die beiden festen Klingen (3) jeweils fest an den beiden Montageteilen (22) montiert sind. 10

Revendications

1. Dispositif de coupeure de semelle en treillis, comprenant : 20
- un bâti (1) ;
- un porte-lame fixe (2) fixé sur le bâti (1), dans lequel deux lames fixes (3) sont disposées symétriquement sur le porte-lame fixe (2), le porte-lame fixe (2) est configuré pour supporter un treillis (10), et chacune des deux lames fixes (3) est configurée pour supporter une semelle en treillis (100) du treillis (10) ;
- deux bras de coupeure (4) montés symétriquement sur le bâti (1), chacun des deux bras de coupeure (4) étant pourvu d'une lame mobile (5) ; et
- un élément d'entraînement (6) monté sur le bâti (1) et configuré pour entraîner les deux bras de coupeure (4) à se déplacer, de sorte que chacun des deux bras de coupeure (4) entraîne la lame mobile (5) à se rapprocher de l'une respective des deux lames fixes (3), et que la lame mobile (5) coopère avec l'une respective des deux lames fixes (3) à couper la semelle en treillis (100). 25
2. Dispositif de coupeure de semelle en treillis selon la revendication 1, dans lequel les deux bras de coupeure (4) sont montés de manière rotative sur le bâti (1), l'élément d'entraînement (6) est capable d'entraîner les deux bras de coupeure (4) à tourner, et la lame mobile (5) est montée à une extrémité de chacun des deux bras de coupeure (4) et est capable d'être entraînée par chacun des deux bras de coupeure (4) à tourner. 30
3. Dispositif de coupeure de semelle en treillis selon la revendication 2, comprenant en outre : un ensemble de transmission (7), dans lequel l'ensemble de transmission (7) comprend un vilebrequin (71) monté de manière rotative sur le bâti (1) et deux bras de liaison (72) montés sur le vilebrequin (71) et capables de 35

tourner seulement par rapport au vilebrequin (71), chacun des deux bras de liaison (72) est relié de manière rotative à l'un respectif des deux bras de coupeure (4), l'élément d'entraînement (6) est relié de manière entraînante au vilebrequin (71) et est capable d'entraîner le vilebrequin (71) à tourner, et le vilebrequin (71) est capable d'entraîner les deux bras de liaison (72) à s'étendre ou se rétracter de manière synchrone lorsque le vilebrequin (71) tourne. 40

4. Dispositif de coupeure de semelle en treillis selon la revendication 3, dans lequel le vilebrequin (71) comprend une première portion de liaison (711) et une seconde portion de liaison (712), un axe central de la première portion de liaison (711) et un axe central de la seconde portion de liaison (712) sont disposés symétriquement par rapport à une ligne médiane du vilebrequin (71), l'un des deux bras de liaison (72) est relié de manière rotative à la première portion de liaison (711) et l'autre des deux bras de liaison (72) est relié de manière rotative à la seconde portion de liaison (712). 45
5. Dispositif de coupeure de semelle en treillis selon la revendication 3 ou 4, dans lequel l'ensemble de transmission (7) comprend en outre une bielle (73), une extrémité de la bielle (73) est reliée de manière rotative à chacun des deux bras de liaison (72) et l'autre extrémité de la bielle (73) est reliée de manière rotative à l'un respectif des deux bras de coupeure (4). 50
6. Dispositif de coupeure de semelle en treillis selon la revendication 2 ou 5, dans lequel deux éléments d'entraînement (6) sont prévus, et chacun des deux éléments d'entraînement (6) est relié de manière entraînante à l'un respectif des deux bras de coupeure (4). 55
7. Dispositif de coupeure de semelle en treillis selon la revendication 6, dans lequel les deux éléments d'entraînement (6) fonctionnent de manière synchrone pour entraîner les deux bras de coupeure (4) à tourner de manière synchrone.
8. Dispositif de coupeure de semelle en treillis selon la revendication 1, dans lequel les deux bras de coupeure (4) sont montés de manière glissante sur le bâti (1), l'élément d'entraînement (6) est capable d'entraîner les deux bras de coupeure (4) à glisser, et la lame mobile (5) est montée à une extrémité de chacun des deux bras de coupeure (4) est capable d'être entraînée par chacun des deux bras de coupeure (4) à se déplacer vers la lame fixe (3).
9. Dispositif de coupeure de semelle en treillis selon la revendication 8, dans lequel l'élément d'entraîne-

ment (6) est un cylindre à air ou un cylindre à huile, et une extrémité de sortie du cylindre à air ou du cylindre à huile est reliée aux deux bras de coupure (4).

10. Dispositif de coupure de semelle en treillis selon la revendication 1, dans lequel le porte-lame fixe (2) comprend une portion de support (21) et deux portions de montage (22) situées sur deux côtés de la portion de support (21), la portion de support (21) est configurée pour supporter le treillis (10), et les deux lames fixes (3) sont montées de manière fixe sur les deux portions de montage (22) respectivement.

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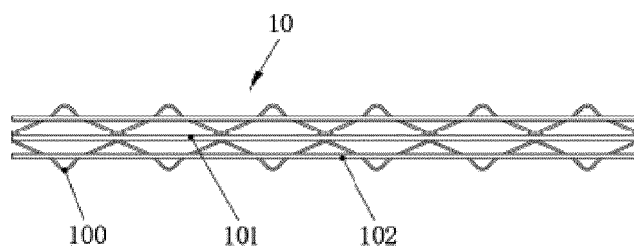


FIG. 1

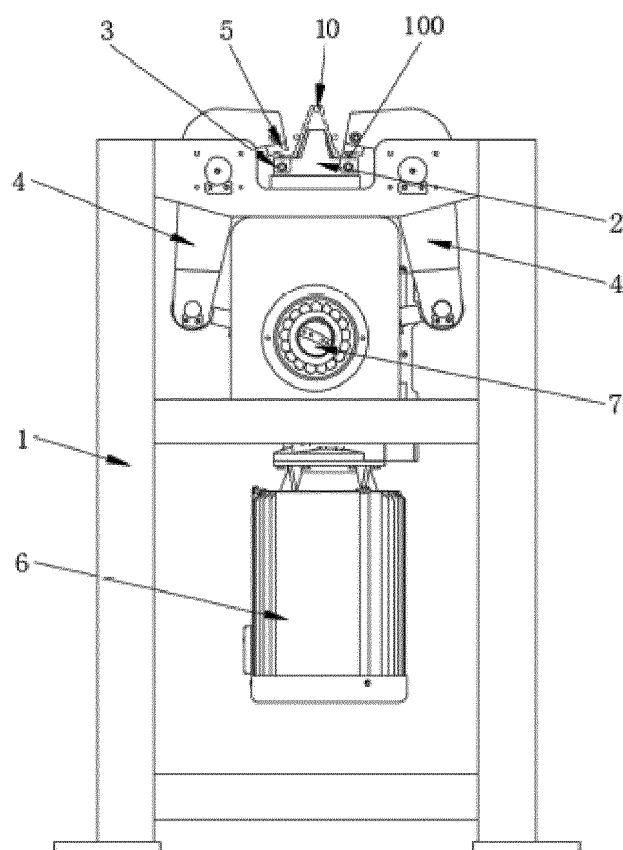


FIG. 2

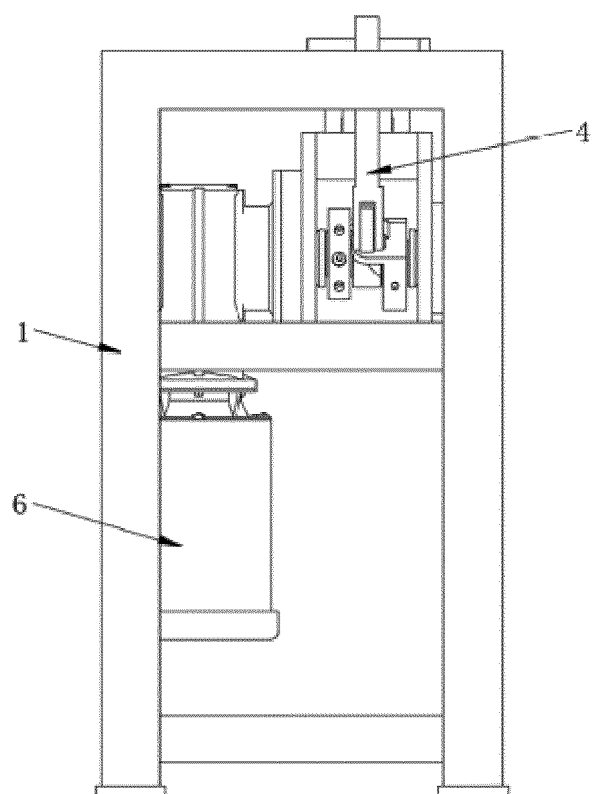


FIG. 3

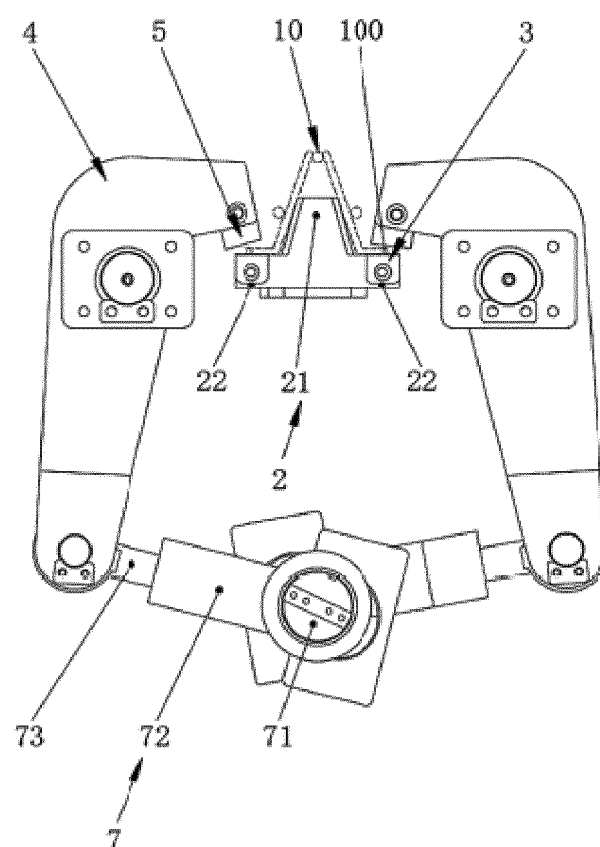


FIG. 4

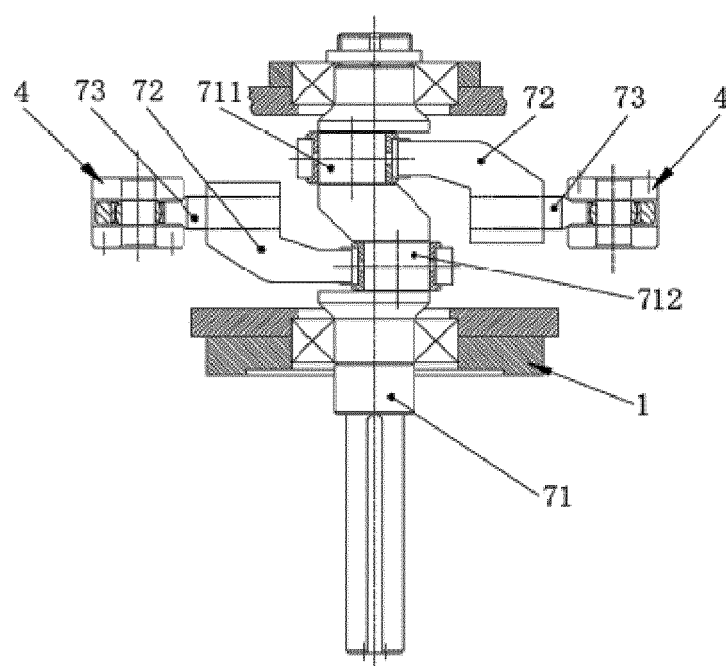


FIG. 5