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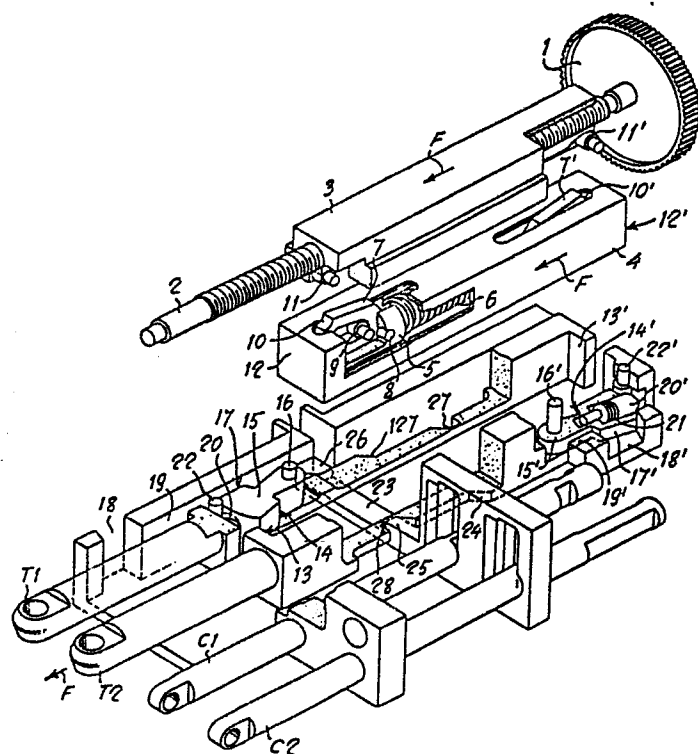
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(54) **Electrically actuated mechanism for rail switch-points.**

(57) This invention relates to an electrically-actuated mechanism for rail switch-points, of the type wherein the actuating, checking and locking devices are arranged within the container enclosing the switch-points mechanism, and the two internal operating rods (T1, T2) thereof, arranged side by side parallelly to each other, are connected to an elastic coupling device acting as a force-limiter and performing the functions of friction, trailing, approach and of stabilizing the points. Said elastic coupling device comprises a sliding ember or slide (3) overlying the internal operating rods (T1, T2) and capable of sliding in the same longitudinal direction as said rods by the action of an electric motor capable of rotating alternately in either directions. The switch-points mechanism according to this invention is characterized in that said elastic coupling device between the two internal operating rods (T1, T2) and the overlying slide (3) comprises a coupling member (4) which is connected to the overlying slide (3) through driving members (5,6,7,8,9,10,11) which are collapsible resiliently within certain limits and which are disconnectible automatically when said limits are exceeded. Said coupling member (4) is arranged between the two internal operating rods (T1, T2) and is connected to each of them by means of two opposite driving abutments, one of which (13, 13') is stationary and the other (14, 14') is retractable so as to be disengageable from the coupling member (4) on completion of the move-

ment of the switch-points in a direction for one operating rod (T1) and in the opposite direction for the other operating rod (T2).

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15 " Electrically-actuated mechanism for rail switch-points "

20 This invention relates to an electrically-actuated
mechanism for rail switch-points, of the type wherein the
actuating, checking and locking devices are arranged
within the container enclosing the switch-points mechanism,
and the internal operating rods thereof, arranged side by
side parallelly to each other, are connected to a driving
unit through an elastic coupling device acting as a
25 force-limiter and performing the functions of friction,
forcing open the points (trailing), facing the points
(approach), and of stabilizing the points. Said coupling
device comprises a slide arranged above said internal
operating rods and slidable in the same longitudinal
30 direction as said operating rods by the action of an

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1 electric motor capable of rotating alternately in either
directions.

5 An electrically-actuated switch-points mechanism of
this type is known from the Italian Patent Application
12485 A/83 in the name of the same Applicant and has
the advantage of reducing the number of members and
devices in the points mechanisms used heretofore by the
10 "Ferrovie dello Stato (Italian State Railways), while
assuring the same functions, reliability and safety.
This type of electrically-actuated switch-points
mechanism has the additional advantage of minimizing
the internal friction losses which constitute sources
of uncertain operation, and of being interchangeable
15 with prior switch-points mechanisms, particularly with
the Italian Railways P 64 points mechanism.

This invention aims to further improve the electrically-
actuated switch-points mechanism according to said Italian
20 Patent Application 12485 A/83 while maintaining all the
advantages thereof with respect to the prior points
mechanisms, and by simplifying said mechanisms, i.e. by
further reducing the number of members and devices therein
and minimizing the friction losses thereof.

25 This object is achieved by the invention, substantially
by virtue of the fact that the elastic coupling device
between the two internal operating rods and the overlying
driven slide comprises a coupling member that is
30 connected to the overlying slide through drive members

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1 which are resiliently collapsible within certain limits
and which are automatically disconnectible when said
limits are exceeded. Said coupling member is arranged
between the two internal operating rods and is
5 connected to each of them by means of two opposite
driving abutments, one of which is stationary and the
other is retractible so as to be disengageable from the
coupling member on completion of the movement of the
switch-points in a direction for one operating rod
10 and in the opposite direction for the other operating
rod.

Those and other features of the invention and the
advantages resulting therefrom will be more apparent
15 from the following description of a preferred embodiment
thereof, shown by way of non-limitating example in the
single Figure of the accompanying sheet of drawing,
which is an exploded perspective and partly sectional
view of some mechanical components of an electrically-
20 actuated switch-points mechanism according to the
invention.

The switch-points mechanism according to the
invention may be applied, similarly to the known
25 Italian Railways switch-mechanisms, either to simple
switch-points and to double-slip switch-points.
The assembling of said mechanism and its connection to
the switch-points are not shown in the drawing since
they are known and obvious to those skilled in the art.

1 Anyway, it is to be reminded that the switch-points
mechanism moves the switch-blades through external
operating rods (not shown) which are connected by means
of pivot pins to the corresponding internal operating
5 rods T1 and T2 of the mechanism. The position of each
blade-tip is re-transmitted to the switch-mechanism
through similar external checking rods (not shown)
connected by means of pivot pins to the corresponding
internal checking rods C1 and C2 of the mechanism.
10 The external operating rods and checking rods are
connected to the switch-blades, preferably, by means of
ball joints so as to permit a considerable ease of
movement and eliminate stresses and friction losses
which enhance wear and are detrimental to regularity.

15 The switch-points mechanism comprises a D.C.
electrical motor (not shown) capable of rotating,
alternately, in either directions. Two separate feeding
conductors and one common return conductor are
20 connected to said motor.

25 By applying the voltage to either one or the other
of the feed windings, the rotation of the motor in
either direction is obtained. This system enables a
double direction of rotation with no need to provide
the mechanism with a rotation reverser. Arranged on the
return conductor within the container for the switch-
point mechanism is a normally-closed switch (not shown)
which opens upon insertion of a hand-control lever.

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1 On the motor shaft there is keyed a pinion (not
shown) that through a train of gears (not shown) moves
a gearwheel 1 keyed on the shaft of a worm-screw 2
which meshes with a corresponding nut-screw of a slide
5 3 which is slidably mounted in suitable guides (not
shown) to move in the same longitudinal direction as
said worm-screw 2.

 The slide 3 can effect longitudinal reciprocatory
10 movements depending upon the direction of rotation of
the worm-screw 2. The system comprising the worm-screw
2 and respective nut-screw is of the balls or rollers
type, or the like, whereby it has a high efficiency
and enables the use of a motor of much smaller power
15 and size as well as a reduced wear of the moving
members due to the absence of sliding friction.

 The slide 3 is arranged above the two internal
operating rods T1 and T2 and is connected to these
20 rods by means of an elastic coupling device comprising
a coupling member 4 having, preferably, a square-section
parallelepipedal outer contour and is accommodated in a
suitable seat between the two rods T1 and T2. Said
coupling member 4, on the top side of which the slide 3
25 reciprocates slidably, is formed with a cylindrical
axial recess. Two cylindrical sliders 5 (only one of
which is exposed) are slidably accommodated within said
cylindrical recess and are positioned in the opposite end
portions of said recess, a compression spring 6 being
30 interposed therebetween. Accommodated in a longitudinal

1 slot of each slider 5 is a suitably shaped plate 7, 7',
which is thus pivotably mounted in the respective slider
about the axis of a transverse pivot 8.

5 Each plate 7, 7' has formed therein a suitably
shaped slot slidably receiving a guide roller 9 which is
solidary with the body of the coupling member 4. The
rollers 9 are intended to prevent the pivotable
plates 7, 7' from rotating about their axes 8 during
10 the normal operation.

The upper portion of each pivotable plate 7, 7' is
provided with a recess 10, 10' and protrudes from the
top side of said coupling member whereon said slide 3
15 reciprocates slidably. Thrust rollers 11, 11' mounted
at the ends of the slide 3 and disposed transversely
to the path of movement thereof will abut against said
recesses 10, 10'.

20 When the slide 3 is moved in either direction,
said rollers 11, 11' will thrust against said pivotable
plates 7, 7' and the latter, being prevented from
rotating about their axes 8, will resiliently transfer
the thrust, through said sliders and compression spring
25 6, to the coupling member 4 and will displace it
together with said slide 3.

The operating rods T1, T2 are displaced in either
direction by the slide 3 by means of the coupling
30 member 4 which, for this purpose, comprises end portions

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1 12, 12' co-operating with driving abutments 13, 13'
integral with the operating rods T1, T2, and with abutment
projections 14, 14' of drive members 15, 15' for the
operation of approach(facing the points), which are
5 pivotably mounted on the operating rods T1, T2.

The front end portion 12 of the coupling member 4
co-operates with a stationary driving abutment 13 of
the operating rod T2 and with a pivotable approach
10 drive member 15 of the other operating rod T1. In a
similar manner, the rear end portion 12' of the coupling
member 4 co-operates with a stationary driving abutment
13' of the operating rod T1 and with a pivotable drive
member 15' of the other operating rod T2. Stated other-
15 wise, at each end portion 12, 12' of the coupling
member 4, the two operating rods T1, T2 will present,
alternately, one a pivotable approach drive member 15,
15' and the other a stationary driving abutment 13, 13'.

20 The approach drive members 15, 15' are pivotable
about pins 16, 16' secured to the respective operating
rods T1, T2 and are formed with two opposite abutment
projections 14, 14' receiving the thrusts of the end
portions 12, 12' of the coupling member 4. On the opposite
25 sides with respect to said abutment projections 14, 14',
the pivotable approach drive members 15, 15' are formed
with guide projections 17, 17' slidable on the side
walls 19, 19' of the guide and support baseplate of the
operating rods T1, T2 and which, on completion of the
30 switch-points movement in either direction, are received

1 alternately into recesses 18, 18' formed in the side
walls 19, 19'.

5 Formed in each approach drive member 15, 15' is
a cylindrical recess containing a push-rod 20, 20'
having a chisel-shaped tip protruding out of the head
portion of the respective approach drive member and is
pushed by a cup-shaped spring 21 against a respective
roller 22, 22' which is fixed to the respective operating
10 rod T1, T2.

The switch-points mechanism according to the
invention is provided with a points lock of the
transverse lock type operatively similar to that of
15 the Italian Railways switch-points mechanism used
heretofore and, therefore, it has all the advantages
thereof as to strength, reliability and safety.
The locking action is obtained by means of a transverse
locking member 23 provided with teeth 25, 26 which
20 engage suitable notches 27, 28 of either one or the
other of the internal operating rods T1, T2 and
checking rods C1, C2 connected to the points in the
closed position thereof, thus locking them in said
position. More particularly, with reference to the
25 position of the rods as shown in the drawing, the
inclined flat 24 of the rod T2 abuts against a similar
inclined flat of the tooth 25 of the locking member 23
and pushes the latter laterally so that the tooth 26
will engage the notch 27 in the rod T1 in the closure
30 position thereof, so as to lock it.

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1 The switch-points mechanism is also provided with a
check device which is similar to that of the heretofore
known Italian Railways switch-point mechanisms, and the
description thereof may, therefore, be omitted. This
5 check device supplies, via suitable relays, the signals
of positioning and locking of the points in the two
positions thereof to a central control station. Said
check device comprises a system of electrical knife
contacts mounted on two shafts which are driven to the
10 two end positions by said operating rods. The exact
closed position of said contacts in either end position,
is the confirmation of the exact positioning of the
operating rods and transverse lock 23 and, therefore,
of the exact positioning of the switch blades in
15 either position, and of their firm locking. The check
circuit only closes if the contacts of both shafts are
in their proper positions.

 The switch-point mechanism, moreover, comprises a
20 limit-switch device the construction of which is
apparent to those skilled in the art. Such a device is
intended to open, upon completion of a switchpoint
operation, the feed circuit to the motor and to pre-set
the same for the successive reverse operation.
25 Said limit switch device comprises two sets of knife-
contacts (not shown) controlled by the slide 3 which, at
the end of its movement, establishes the required
electrical contacts for the function mentioned above, on
either one or the other set of contacts.

1 The dimensions, construction and method of mounting
of the switch-points mechanism according to the invention
are, preferably, such as to permit its perfect interchange
ability with the known Italian Railways P.64 switch-
5 points mechanism without modifying the existing external
members (foundation slabs, tierods, etc.). The stroke of
the switch-blades may be maintained at 150 mm.

Operation

10 In each of the two positions to be assumed by the
switch-points, the latter is locked by the point lock 23
arranged within the container for the switch-points;
therefore, the sequence of operations for throwing over
15 the points are as follows: movement of the spaced apart
blade towards the stock-rail, removal of the point lock,
throwing over of both blades, stopping of a blade in
the close-by position, pursuance of the movement of
the spaced apart blade and new application of the point
20 lock.

 In the initial position shown in the drawing, the
operating rod T1 is related to the spaced apart blade
and the operating rod T2 is related to the close-by blade
25 that is rigidly locked by the transverse locking member
23 by means of the respective tooth 25 engaged in the
notch 28 of said rod T2. Again with reference to the
drawing, the operation occurs in the direction of the
arrow F. At the beginning, the end portion 12 of the
30 coupling member 4 engages the abutment projection 14 of

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1 the approach drive member 15 which is pivoted on the rod
T1 of the spaced apart blade and is spaced from the
stationary drive member 13 of the rod T2 of the close-by
blade. The pushing action of the coupling member 4
5 against the abutment projection 14 of the approach drive
member 15 causes - through the pivot 16 - the
displacement of the freely-movable rod T1. The rod T2
related to the closed blade is presently still and
locked. After the rod T1 has moved as far as to permit
10 the transverse locking member 23 to move away, the
tooth 26 will reach a depressed or undercut flat 127,
and the end portion 12 of the coupling member 4 will
engage the driving abutment 13 of the rod T2, whereby
the latter - pushed by said end portion 12 - starts
15 moving.

From now on, the rods T1 and T2 move simultaneously
until the rod T1 will be stopped when the blade to
which it is connected engages the respective stock-rail.
20 At this instant, the guide projection 17 of the approach
drive member 15 will be in front of the recess 18
formed in the side wall 19 of the baseplate. The coupling
member 4, moved by the slide 3, goes on pushing against
the abutment projection 14 of the approach drive member
25 15 which, being prevented from advancing further, is
obliged to rotate about its pivot 16. The pivotal
movement of the approach drive member 15 is hindered by
the pin 22 which, abutting against the inclined flat of
the chisel-shaped tip of the push-rod 20, tends to push
30 said rod 20 into the recess therefor, thus compressing

1 the respective cup-shaped spring 21 until, after a
certain effort (approach effort) the push-rod 20 is
pushed back to such an extent as to permit the
approach drive member 15 to move angularly so that
5 its guide projection 17 may enter the recess 18 in the
side wall 19 of the baseplate, thus withdrawing the
abutment projection 14 from the pushing action of the
end portion 12 of the coupling member 4, whereby the
latter may go on pushing against the driving abutment
10 13 of the operating rod T2, so that the latter may
effect the point locking of the rod T1 and respective
overlap.

The overlap permits the opened blade to effect
15 limited displacements without affecting the locking
of the closed blade.

The switch-points mechanism according to the
invention has the advantage to take up, due to the
20 elastic coupling device between the slide 3 and
operating rods T1, T2, any displacement of the rod for
the opened blade due to shocks or vibrations by moving
it back to its original point-locking position.
Upon the opposite operating maneuver, the slide 3 is
25 moved in the direction opposite to that of the arrow
F and causes movements which are similar but contrary
to those described above. The switch-points mechanism
according to the invention may be operated also
manually by means of a handle to be coupled with a
30 suitable clutch (not shown), which also opens an

1 electrical contact in the operating circuit, thus
preventing any simultaneous electrical operation.

Approach (facing the points).

5

As stated above, during the step of introduction of the guide projection 17 of the approach drive member 15 into the recess 18 in the sidewall 19 of the baseplate, the thrust of the slide 3 is taken up
10 by the cup-shaped spring 21 which, thus, exerts an approach action, i.e. an action to force the respective blade against the rail-stock. By this forcing action of the blade against the rail-stock, is obtained, within certain limits, a check of the
15 track-gauge. In fact, in case of absence of a contrasting action of the rail-stock, the blade of the rod T1 would override, whereby the notches of the respective operating rods and checking rods would not be in line with the transverse locking.
20 member 23 and the latter would be prevented from effecting its point-locking stroke and actuation of the check device. Therefore, the action of the spring 21 makes the closing blade exert a pre-established pressure against the rail-stock, thus over-coming
25 small obstacles which might be interposed between the blade and rail-stock and permitting to ascertain the presence and exact positioning of the rail-stock.

Disengagement of the slide.

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In the switch-points mechanism according to the

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1 invention, the elastic coupling between the slide 3
and operating rods T1, T2 aims to prevent any damage
to the motor and members of the kinematic chain in
case of an obstacle or strong resistance opposing to
5 the movement of the blades. In fact, any accidental
stop of the blades in an intermediate position during
the switch-points operative movement, no matter the
cause, makes the operating rods T1, T2 stop as well.
In such a circumstance, since the motor goes on
10 pushing the slide 3 through the worm-screw 2, the
pins 11 and 11' will pursue exerting a corresponding
push against the shaped plates 7 or 7'.
Said plates 7 or 7', therefore, displace their sliders
5 or 5' against the action of the spring 6 until the
15 guide rollers 9 or 9' will reach the end of the slot
wherein they slide, where a suitable shaping of the
slot causes a downward rotation of the respective
plates 7 or 7' about their pivots 8 or 8'. The slide 3
is thus disconnected from the operating rods T1, T2
20 and may terminate its stroke so as to actuate the
limit-switch device to cut off the power supply to the
motor and pre-set the circuit for the reverse operation.
The restoration of the normal condition of the switch-
points mechanism is obtained automatically by effecting
25 the reverse operation. In fact, the backward movement
of the slide 3 permits the shaped plates 7 or 7',
pushed upwards by suitable springs (not shown), to
resume their original normal angular position, whereby
restoring the elastic connection between the slide 3
30 and operating rods T1, T2.

1 Trailing (forcing open the points)

5 The switch-points according to the invention is
of the forcing-open type, whereby should said switch-
points be engaged by a train from the heel and in a
wrong position, the displacement of the blade
assembly would be obtained with no damage to the
members, either internal and external, of the switch-
points mechanism. The trailing action occurs as
10 follows: the axle of the vehicle which engages the
heel of the points in a wrong position will force the
open blade and force it toward its respective rail-
stock. Since the rod T1 of the now open blade is
connected to the slide 3 through the elastic coupling
15 device, the slide 3 is urged to move in the same
direction as the open blade and respective operating
rod T1. The connection between the slide 3 and worm-
screw 2, however, is made irreversible by means of a
stabilizing device (not shown) whereby the slide 3
20 cannot be driven by the rod T1. In these conditions,
the pin 11' solidary with the slide 3, which is
unmovable in its position, exerts a reactive force on
the plate 7' which, through the slider 5', causes a
compression of the spring 6. The guide roller 9',
25 therefore, moves along the slot of the plate 7'
until it reaches the end of said slot where, as stated
above, a suitable shaping urges the plate 7' downwards
by pivoting it about its pivot 8. Thus, the coupling
member 4 is disengaged from the slide 3 and may slide,
30 under the pushing action of the rod T2, as far as to

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1 actuate the limit-switch device and cut off the power
supply to the motor. As a result, the operating rod T1
connected to the coupling member 4 is, in turn,
disconnected from the slide 3 and the switch-points
5 frame may resume its operational movement with no
damage to the components. In the reverse movement,
the slide 3 moves back and brings the shaped plate
back to its original position and re-establishes the
elastic coupling between the slide 3 and rod T1.
10 Therefore, the capability of trailing the points
affords the re-establishment of the normal operating
conditions by means of a successive operative command,
with no need of a local intervention. It is also to be
noted that, in case of trailing the points, also with
15 the switch-points mechanism of the invention, there is
no possibility to check the positioning and points-
locking in the switchpoints via the checking rods C1
and C2, as soon as the margin of overlap is nullified.
20 Permanent or optional uncapability of trailing(forcing
open the points).

25 The switchpoints mechanism according to the
invention may be made incapable of trailing either
optionally under command or permanently.
The uncapability under command is effected by means
of an electromagnet which is arranged within the
container of the switchpoints mechanism and which,
when not energized, latches the point-lock 23.
30 The permanent uncapability is obtained by means of a

1 mechanical device which, however, permits the rod
connected to the open blade to move to such an
extent as to cause the loss of the electrical
positional check of the switchpoints, but not the
5 loss of the point-lock capability.

Of course, the invention is not limited to the
described and illustrated embodiment, but many
changes and modifications, especially of constructional
10 nature and concerned with technical and functional
equivalents, may be made thereto without departing
from the basic principles set forth above and
claimed hereinafter.

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1 C L A I M S

1. An electrically-actuated mechanism for rail
switchpoints, of the type wherein the actuating,
5 checking and locking devices are arranged within
the container enclosing the switchpoints mechanism,
and the two internal operating rods thereof, arranged
side by side parallelly to each other, are connected
to an elastic coupling device acting as a force-
10 limiter and performing the functions of friction,
trailing (forcing open the points), approach (facing
the points), and of stabilizing the points, and
comprising a slide overlying the internal operating
rods and slidable in the same longitudinal direction
15 as said rods by the action of an electrical motor
rotatable alternately in either direction,
characterized in that said elastic coupling device
between the two internal operating rods (T1, T2) and
the overlying driven slide (3) comprises a coupling
20 member (4) which is connected to the overlying slide
(3) through driving members (5,6,7,8,9,10,11) which
are collapsible resiliently within certain limits
and which are disconnectable automatically when said
limits are exceeded, while it is arranged between
25 the two internal operating rods (T1, T2) and is
connected to each of them by means of two opposite
driving abutments, one of which (13, 13') is stationary
and the other (14, 14') is retractable so as to be
disengageable from the coupling member (4) on
30 completion of the movements of the switchpoints in a

1 direction for one operating rod (T1) and in the opposite
direction for the other operating rod (T2).

2. A switchpoints mechanism according to claim 1,
5 characterized in that each end portion (12, 12') of the
coupling member (4) co-operates with a stationary
driving abutment (13 or 13') of one of the internal
operating rods (T1 or T2) and with a retractable
driving member (14 or 14') of the other internal
10 operating rod (T1 or T2).

3. A switchpoints mechanism according to claim 1
or 2, characterized in that said retractable driving
member (14 or 14') is arranged on an approach drive
15 member (15 or 15') which is pivotably mounted on
the respective internal operating rod (T1, T2) and is
maintained in the angular engagement position against
the respective end portion (12, 12') of the coupling
member (4) by the action of a guide projection (17 or
20 17') formed thereon and slidable on the side wall
(19 or 19') of the baseplate guiding the internal
operating rods (T1, T2), said guide projection (17 or
17') being adapted to enter, on completion of the
movement of the respective internal operating rod
25 (T1 or T2), a recess (18 or 18') in the respective
side wall (19 or 19') of the baseplate, thus permitting
said approach drive member (15 or 15') to displace
angularly so as to disengage its driving abutment
(14 or 14') from the coupling member (4) and to
30 permit the latter to pursue its movement to the end of

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1 the stroke of the other internal operating rod (T1 or
T2) to which it is coupled by means of a stationary
driving abutment (13 or 13').

5 4. A switchpoints mechanism according to claim 3,
characterized in that the angular displacement of
each pivotable approach drive member (15 or 15') to
disengage from the coupling member (4) occurs
against an opposing elastic action obtained, for
10 example, by means of a push-rod (20 or 20') slidably
guided in the approach drive member (15 or 15'),
urged outwards by a spring (21) and co-operating,
through its chisel-shaped outer end, with a roller
(22 or 22') rotatably mounted on the respective
15 internal operating rod (T1 or T2).

5. A switchpoints mechanism according to one or
more of the preceding claims, characterized in that
said coupling member (4) has associated therewith
20 two thrust members (for example, pins 11, 11') fixed
to the slide (3) and spaced from each other in the
same longitudinal direction of the two operating rods
(T1, T2), said thrust members (11, 11') co-operating
with two driving members (7, 7') carried by the coupling
25 member (4) and adapted to move resiliently to a
certain extent, starting from a limit position in
the longitudinal direction of the respective rod,
and to disengage automatically from the corresponding
thrust member of the slide when said extent has been
30 exceeded.

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1 6. A switchpoints mechanism according to claim 5,
characterized by two sliders (5) slidably accommodated
in a longitudinal recess of the coupling member (4)
and pushed by an interposed compression spring (6) to
5 initial positions against stop shoulders at the
opposed ends of said recess in the coupling member
(4), while said driving members of the coupling member
(4) are formed by two shaped plates (7, 7') which are
arranged each in one of said sliders (5) so as to be
rotatable about a transverse pivot (8) and comprise
each a driving portion (10, 10') protruding upwardly
towards the overlying slide (3) through a longitudinal
slot in the coupling member (4) and co-operating with
an associated driving or thrust member (11, 11') of
said slide (3).

7. A switchpoints mechanism according to claims 5
and 6, characterized in that each pivotable shaped
plate (7, 7') is formed - in the end thereof opposed
from the spring (6) - with a suitably shaped slot
slidably receiving a guide roller (9) fixed to the
coupling member (4) and maintaining the pivotable
shaped plate (7, 7') in its angular engagement
position wherein its driving portion (10, 10') may
be engaged by the associated driving or thrust member
(11, 11') of the overlying slide (3), whereas
when said shaped plate (7, 7') moves resiliently
towards the spring (6) the respective guide roller (9)
displaces said plate (7, 7') angularly to a
disengagement position wherein its driving portion

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1 (10, 10') disengages from the associated driving or
thrust member (11, 11') of the slide (3).

5 8. A switchpoints mechanism according to one or
more of the preceding claims, characterized in that
the coupling member (4) slidable together with the
slide (3) is substantially of prismatic shape and is
accommodated in a corresponding seat defined by
the rear ends of the internal operating rods.

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9. An electrically-actuated mechanism for rail
switchpoints, constructed and operating completely
or partly substantially as described, as shown and
for the purposes set forth above.

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