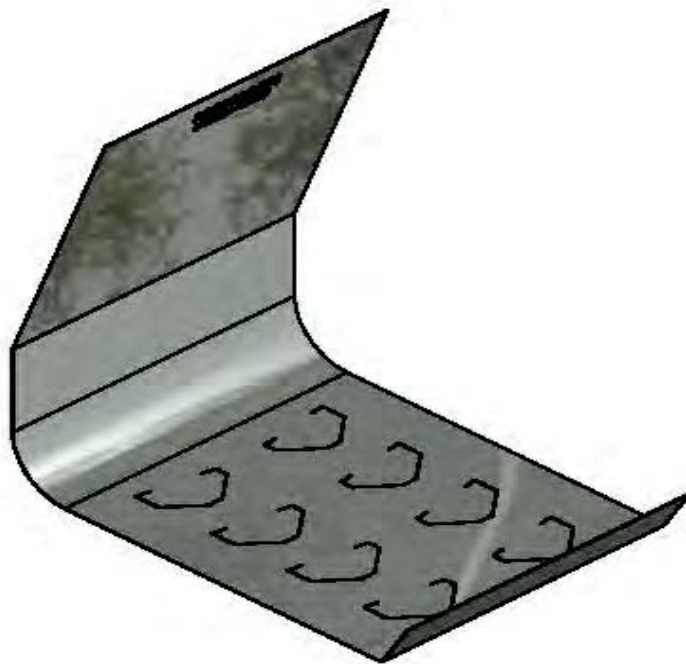


SandTrap[®]



UNA PATENTE DE:

 **Covema y Obras**

C/ Del Progreso, 2 - Planta 1 - Oficina 174
28906 Getafe (Madrid / Spain)
Tel. +34 607 577 743 (Spain)
Tel.: +966 56 392 0080 (Arabia Saudí)
info@covemayobras.com
www.covemayobras.com

Screen system to intercept the winds and capture their sand content.

It consists of a sequence of screens, each of which including a vertical plane facing the winds and connected to a horizontal plane secured in the ground. The set formed in this way resembles the capital letter L.

The horizontal base is able to contain a mass of soil that is used to stabilize the wind thrusts.

Some holes are drilled in the horizontal base to enable the discharge of the soil mass in the event of disassembly. As a consequence of the creation of these gaps, a flap is formed in each of them which, if oriented and secured in the ground, will serve as a brake on the possible displacement of the system by the wind thrusts (FIG 3).

In order to increase the capacity of the sand protection system, some pits are dug in front of the screens (FIG 3). The result of the excavation is used to load the screens of soil on its horizontal plane. The trench thus formed serves to capture part of the wind-borne sands.

When the accumulation of sands in the system environment is large enough, the system loses its effectiveness and is disassembled (FIG. 4) as follows:

- The structure is slowly raised using the rings and letting out as much soil contained in its horizontal base as possible. The action of emptying the structure of soil is completed by overturning the whole construction.
- The sand accumulated is spread in the same place, creating a new level regarding the initial level and the screen is located in the same place (FIG 5).

The assembly formed in this way has greater height compared to the initial level.

The trench is dug again in front of the screen and the horizontal base is loaded with the excavation remains so that the system becomes operational again.

WIND BEHAVIOR IN YOUR MEETING WITH THE SCREEN

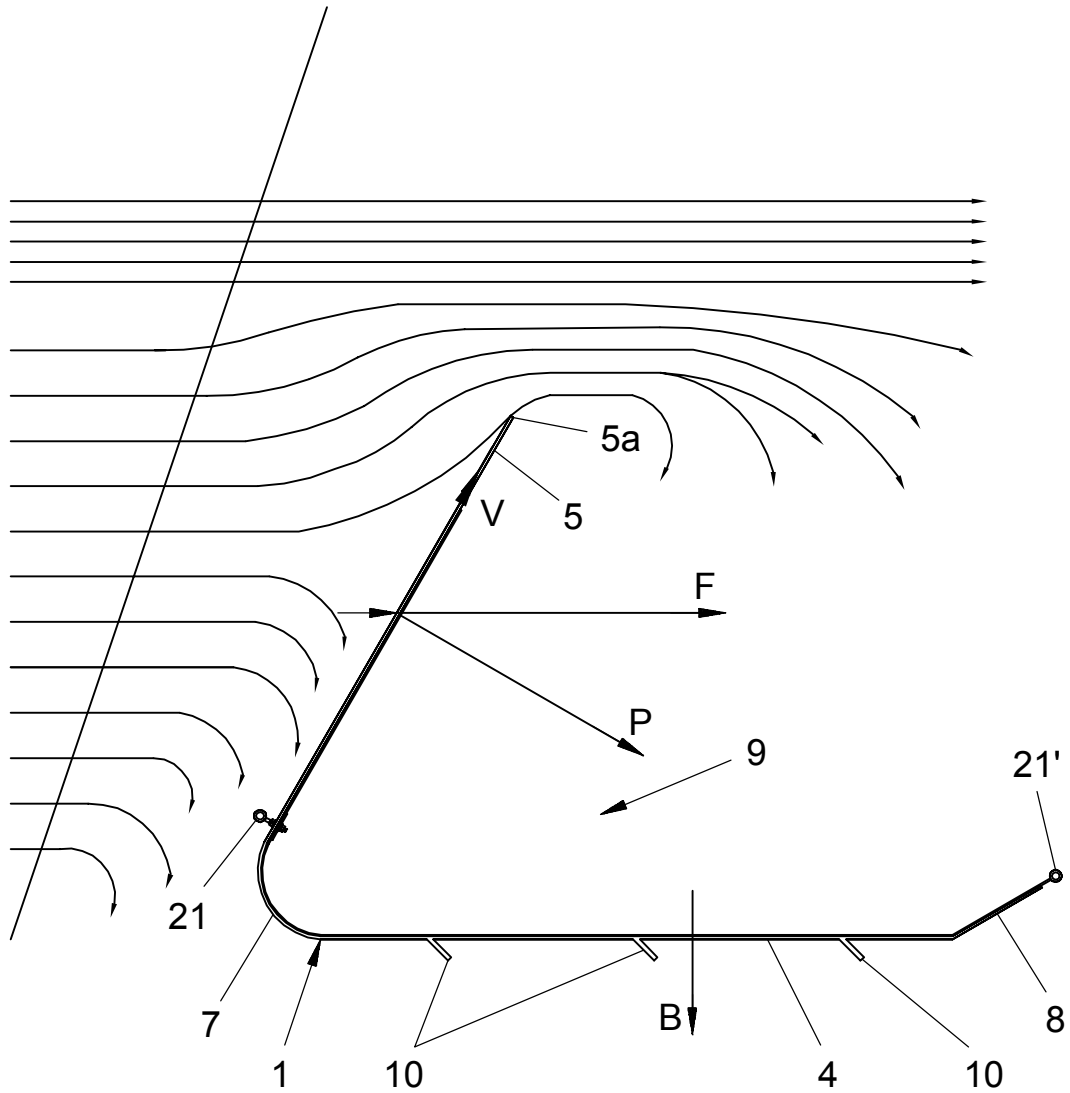


FIG. 1

SITUATION OF THE SCREEN WITH REGARD TO THE RAILWAY (DE = 40M)

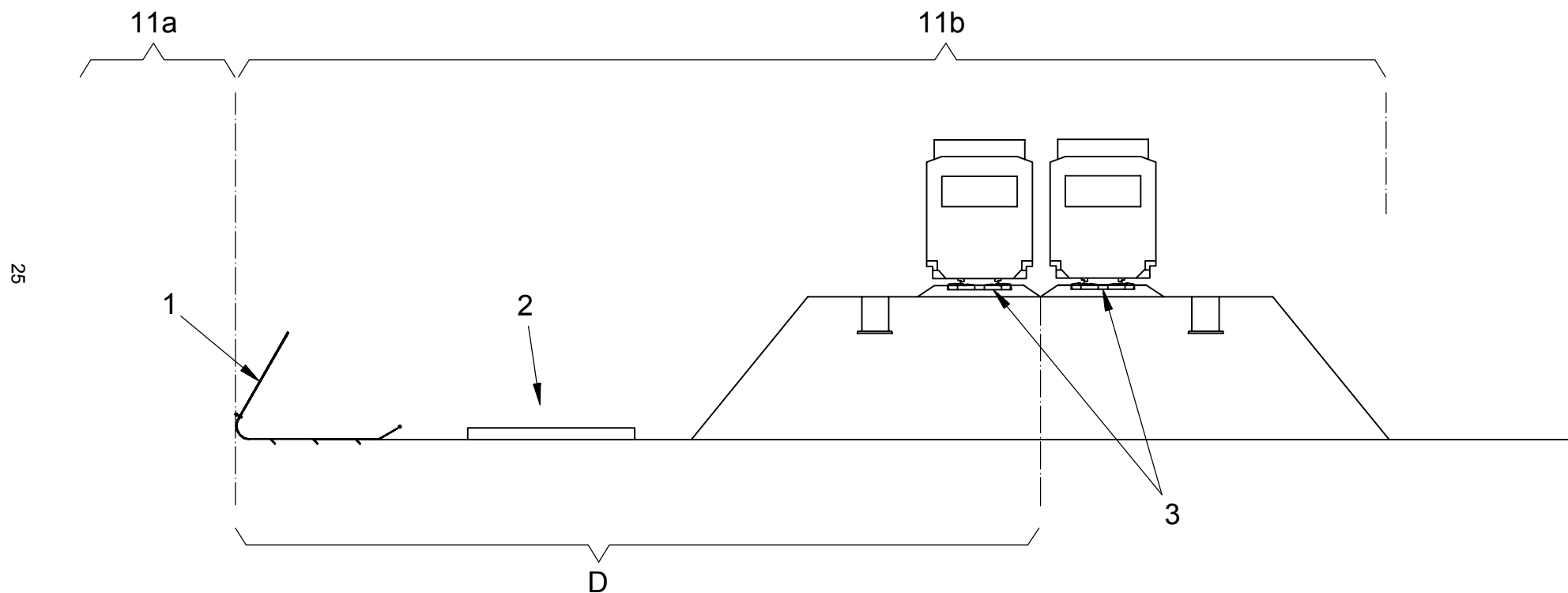


FIG. 2

EMBEDDED TABLECLOTH ON THE FLOOR

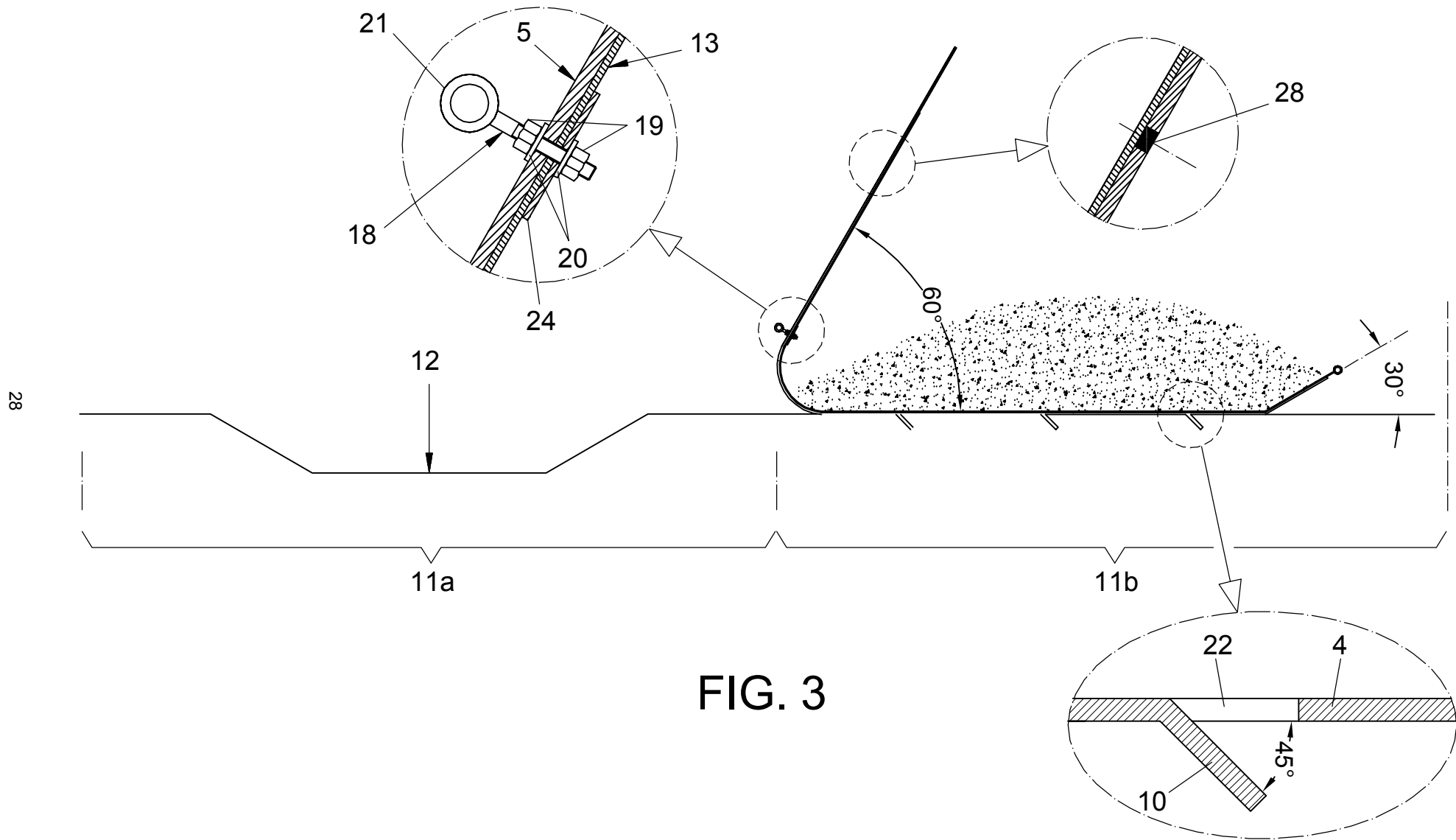


FIG. 3

LOADED SAND SYSTEM

29

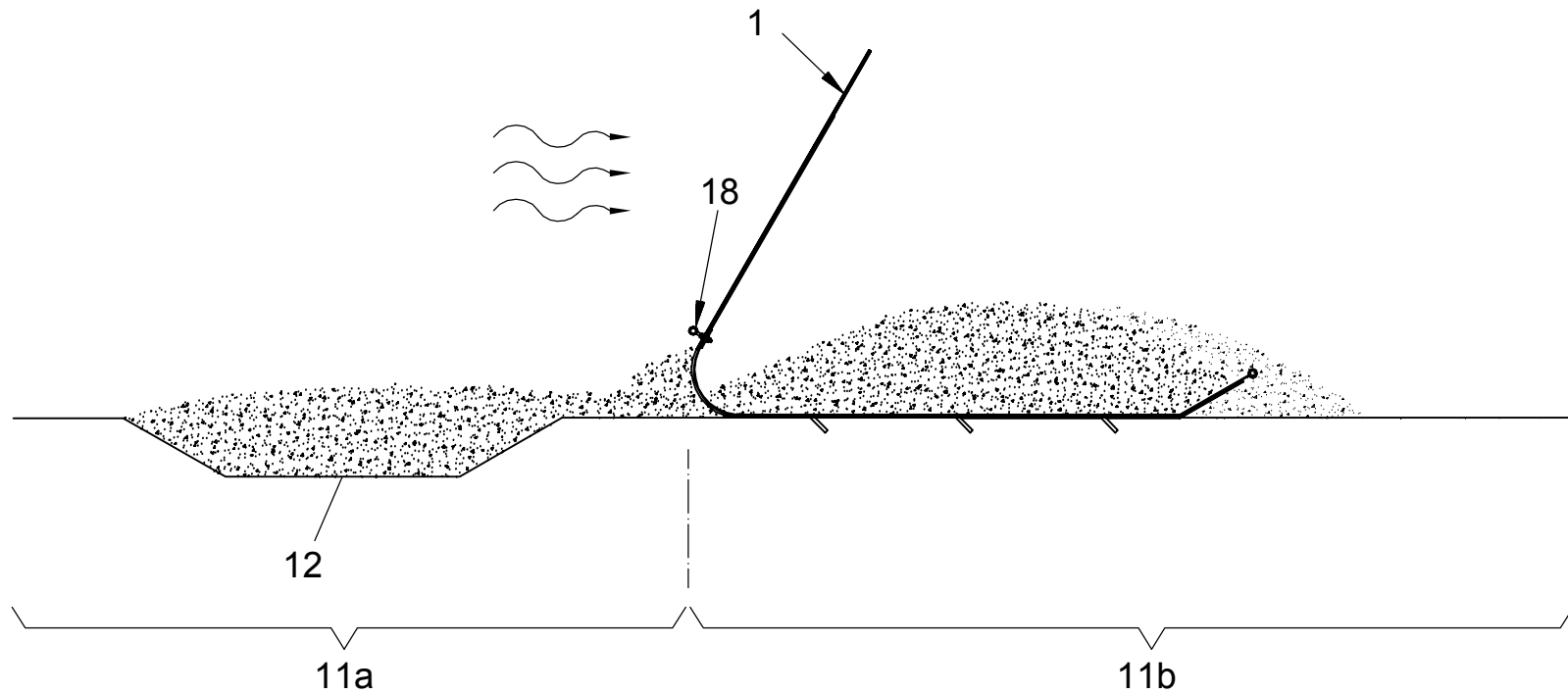


FIG. 4

DISASSEMBLY AND NEW SYSTEM PLACEMENT

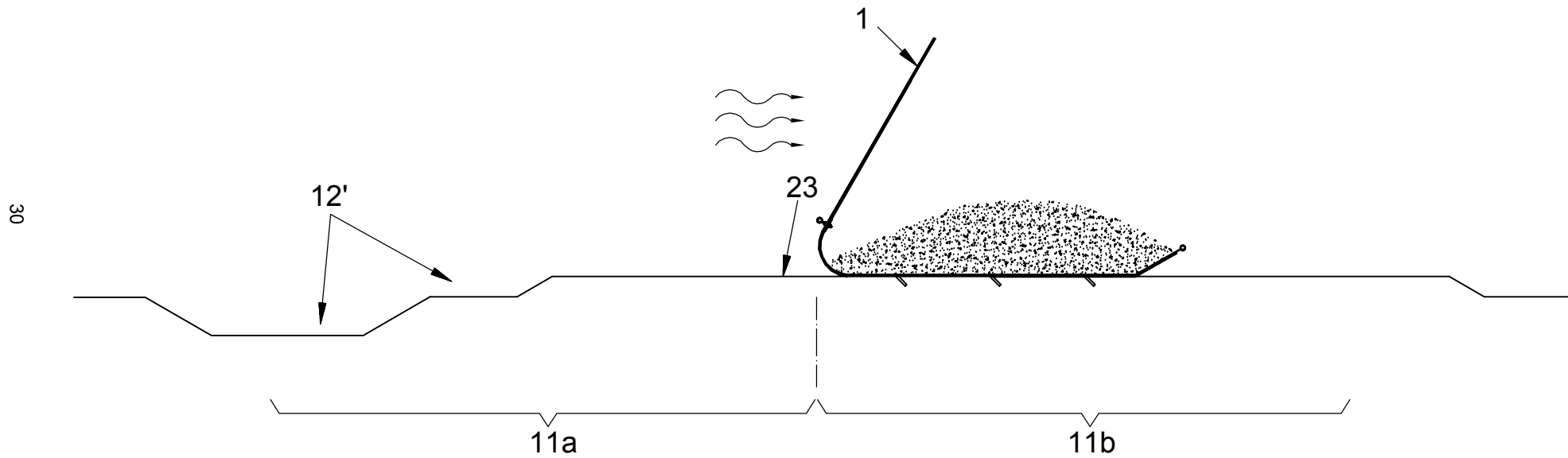


FIG. 5



STATUS OF THE SYSTEM MISSING ONE MONTH OF ITS PLACEMENT.
IT CAN BE STARTED TO APPRECIATE SAND ACCUMULATION



STATE OF THE SYSTEM MISSING THREE MONTHS OF ITS PLACEMENT.
ACCUMULATION OF SAND START TO HIGHLIGHT



WE CAN OBSERVE THE SAND LACK ON THE RAILWAYS.
DUE TO AN AUXILIARY WORK THAT WAS PERFORMED TO PROTECT AN INSTALLATION



VIEWING MORE DETAILS OF THE ARENA DEMAND ON THE RAILWAYS



ELEMENT WHERE THE GROUNDING TABLES ARE APPRECIATED



ASSEMBLY OF THE STRUCTURE