



(22) Date de dépôt/Filing Date: 2003/08/20

(41) Mise à la disp. pub./Open to Public Insp.: 2004/04/19

(45) Date de délivrance/Issue Date: 2005/05/17

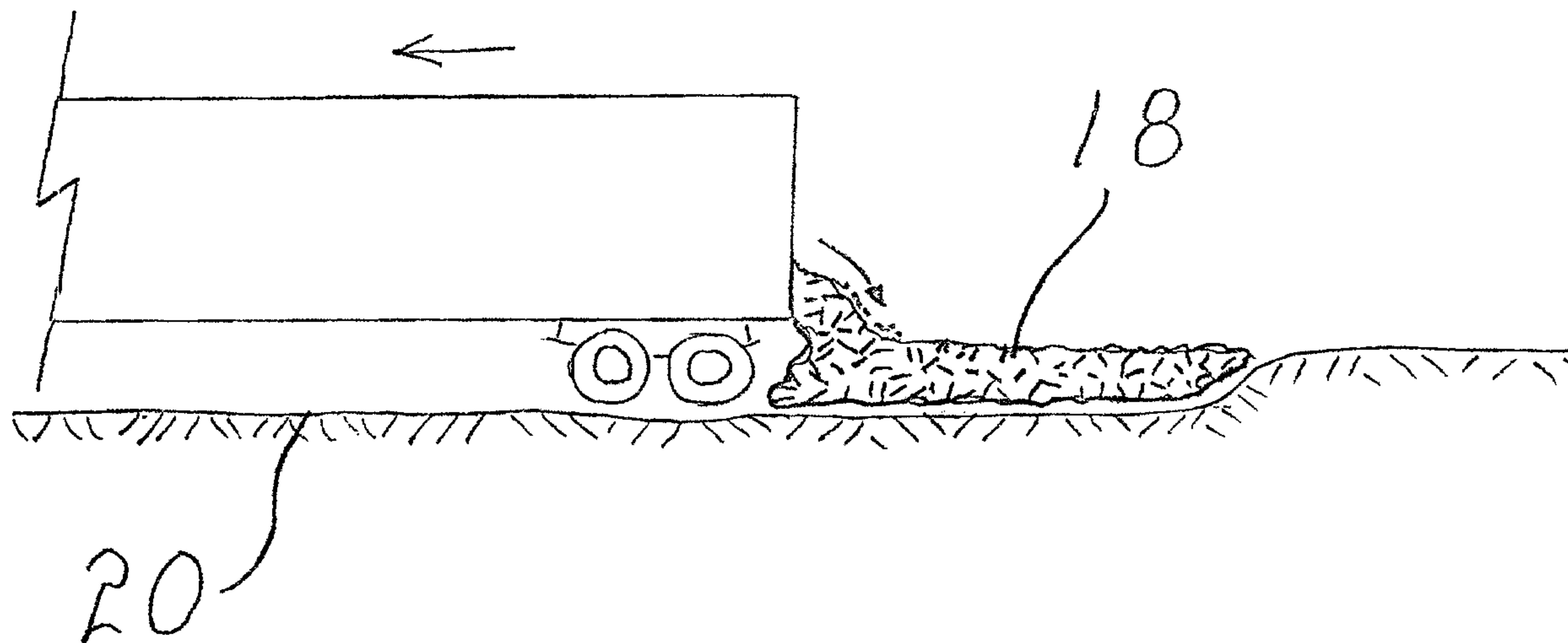
(51) Cl.Int.⁷/Int.Cl.⁷ E01C 9/08, E01C 7/00

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(54) Titre : METHODE DE CONSTRUCTION DE ROUTES TEMPORAIRES A PARTIR DE FIBRES VEGETALES
(54) Title: METHOD OF MAKING TEMPORARY ROADS FROM PLANT FIBRE



(57) Abrégé/Abstract:

A method of making temporary roads out of plant fibre includes a first step of providing plant fibre of differing lengths. A second step involves spreading the plant fibre along an intended travel path. A third step involves compacting the plant fibre. It has been found that medium length elongate plant fibre, when present in sufficient quantity, serve to mesh together the short length plant fibre to form a cohesive ground cover mat.

ABSTRACT OF THE DISCLOSURE

A method of making temporary roads out of plant fibre includes a first step of providing plant fibre of differing lengths. A second step involves spreading the plant fibre
5 along an intended travel path. A third step involves compacting the plant fibre. It has been found that medium length elongate plant fibre, when present in sufficient quantity, serve to mesh together the short length plant fibre to form a cohesive ground cover mat.

TITLE OF THE INVENTION:

Method of making temporary Roads from plant fibre

FIELD OF THE INVENTION

5 The present invention relates to a method of making temporary roads from plant fibre.

BACKGROUND OF THE INVENTION

10 Temporary roads must be built whenever work must be performed in undeveloped areas. For example, when drilling oil and gas wells, roads must be built in order to allow trucks and equipment access to the well site.

15 There are frequently regulations associated with performing work in environmentally sensitive areas, which require the site to be returned to its original pristine condition when work is completed. Such site restoration can become quite expensive with gravel roads.

20 Experimental roads have been built using plant fibre. There are abundant sources of plant fibre available in the form of sawdust, shavings and wood chips from the forestry industry. The advantage of using plant fibre in the construction of temporary roads, is the relatively low cost
25 of site restoration. The plant fibre used to build the temporary road can be scattered about the site. Once thoroughly scattered, there will be negligible visible traces of the former road and the scattered plant fibre will break down through natural processes of decomposition.

30 Unfortunately, the attempts to make temporary roads out of sawdust, shavings and wood chips have proven to be unsuccessful. The sawdust, shavings and wood chips tends to slide past each other. They do not bind or bridge and are
35 unable to provide an adequate driving surface.

SUMMARY OF THE INVENTION

What is required is a method of making temporary roads from plant fibre.

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According to the present invention there is provided a method of making temporary roads out of plant fibre. A first step involves providing plant fibre of differing lengths, including:

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at least 20% by volume of medium length elongate plant fibre of a length of not less than 2 inches and not more than 5 inches;

not more than 10% by volume of long length elongate plant fibre of a length of greater than 5 inches; and

15

a balance of short length plant fibre of a length of less than 2 inches.

20

A second step involves spreading the plant fibre along an intended travel path. A third step involves compacting the plant fibre with the medium length elongate plant fibre serving to mesh together the short length plant fibre to form a cohesive ground cover mat.

25

It has been found that short length plant fibre will not built an adequate road. However, if medium length elongate fibre is added in sufficient quantities, it has been found that the medium length elongate plant fibres serve to mesh together the short length plant fibre to form a cohesive ground cover mat which is an adequate road travel surface.

30

It was thought that if medium length elongate plant fibre worked, that long length elongate plant fibre would work even better. It has been found that this is not the case. To the contrary, when long length elongate plant fibre is present in too great a volume, it prevents the desired meshing phenomenon from taking place.

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BRIEF DESCRIPTION OF THE DRAWINGS

These and other features of the invention will become more apparent from the following description in which
5 reference is made to the appended drawings, the drawings are for the purpose of illustration only and are not intended to in any way limit the scope of the invention to the particular embodiment or embodiments shown, wherein:

FIGURE 1 is a side elevation view, in section, of a
10 temporary road constructed in accordance with the teachings of the present method.

FIGURE 2 is a perspective view of a first step of providing plant fibres of differing lengths.

FIGURE 3 is a side elevation view of a second step of
15 spreading the plant fibre along an intended travel path.

FIGURE 4 is a side elevation view of a third step of compacting the plant fibre along the intended travel path.

20 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred method of making a temporary road with plant fibre will now be described with reference to **FIGURES 1** through **4**.

25 Referring to **FIGURE 2**, a first step involves providing plant fibre of differing lengths. There is at least 20% by volume of medium length elongate plant fibre 12 of a length of not less than 2 inches and not more than 5 inches. There is not more than 10% by volume of long length elongate plant
30 fibre 14 of a length of greater than 5 inches. The balance is of short length plant fibre 16 of a length of less than 2 inches.

Referring to **FIGURE 3**, a second step involves spreading

an appropriate mixture 18 of medium length elongate plant fibre 12, long length elongate plant fibre 14 plant fibres 12 and a balance of short length plant fibre 16 along an intended travel path 20.

5

Referring to **FIGURE 4**, a third step involves compacting mixture 18. It has been found that that, when present in quantities of at least 20%, medium length elongate plant fibre 12 serves to mesh together short length plant fibre 16 to form a cohesive ground cover mat 22 as illustrated in **FIGURE 1**. The short length plant fibre 16 is not suitable by itself. The compacting of mixture 18 can be accomplished by simply driving heavy equipment back and forth along the road.

15 In the illustrated embodiment, mixture 18 is of wood fibre. Although wood fibre is preferred, it will be appreciated that other comparable fibres may be used.

Cautionary Warnings:

20 It was thought that if medium length elongate plant fibre worked, that long length elongate plant fibre would work even better. It has been found that this is not the case. To the contrary, when long length elongate plant fibre is present in too great a volume, it prevents the desired meshing phenomenon from taking place. It would be undesirable to have more than 10% of long length elongate plant fibre.

30 In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be one and only one of the elements.

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It will be apparent to one skilled in the art that modifications may be made to the illustrated embodiment without departing from the spirit and scope of the invention as hereinafter defined in the Claims.

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

- 5 1. A method of making temporary roads out of plant fibre,
comprising the steps of:
- providing plant fibre of differing lengths, including:
 - at least 20% by volume of medium length elongate
plant fibre of a length of not less than 2 inches and not
10 more than 5 inches;
 - not more than 10% by volume of long length elongate
plant fibre of a length of greater than 5 inches;
 - a balance of short length plant fibre of a length
of less than 2 inches; and
 - 15 spreading the plant fibre along an intended travel path;
and
 - compacting the plant fibre with the medium length
elongate plant fibre serving to mesh together the short
length plant fibre to form a cohesive ground cover mat.
- 20
2. The method as defined in Claim 1, wherein the plant fibre
used is wood fibre.

FIG. 1

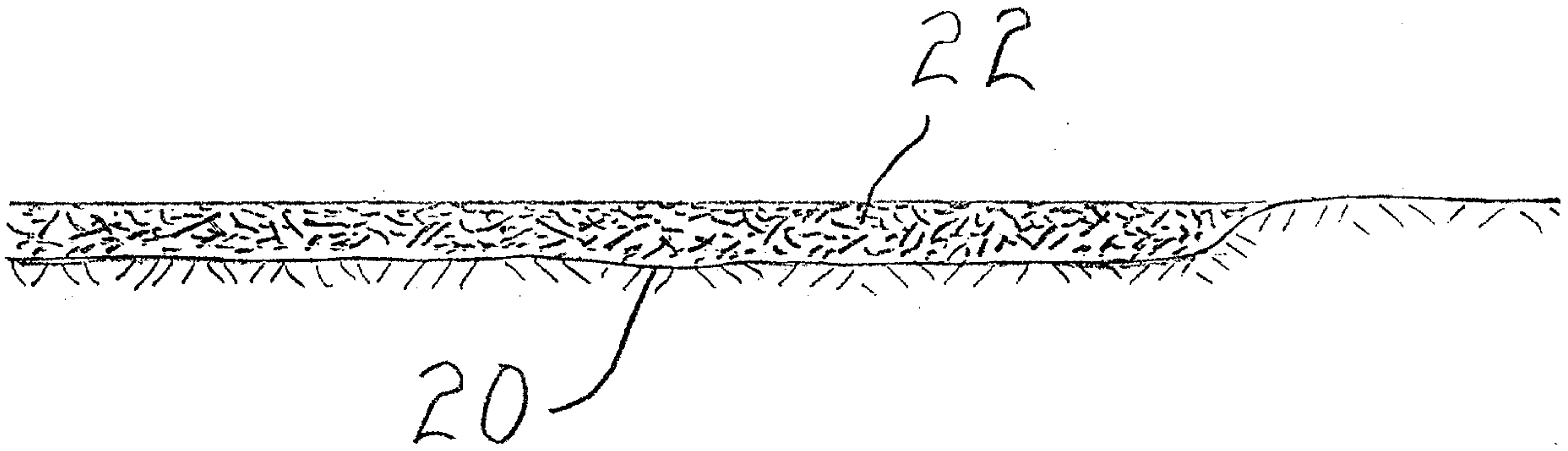


FIG. 2

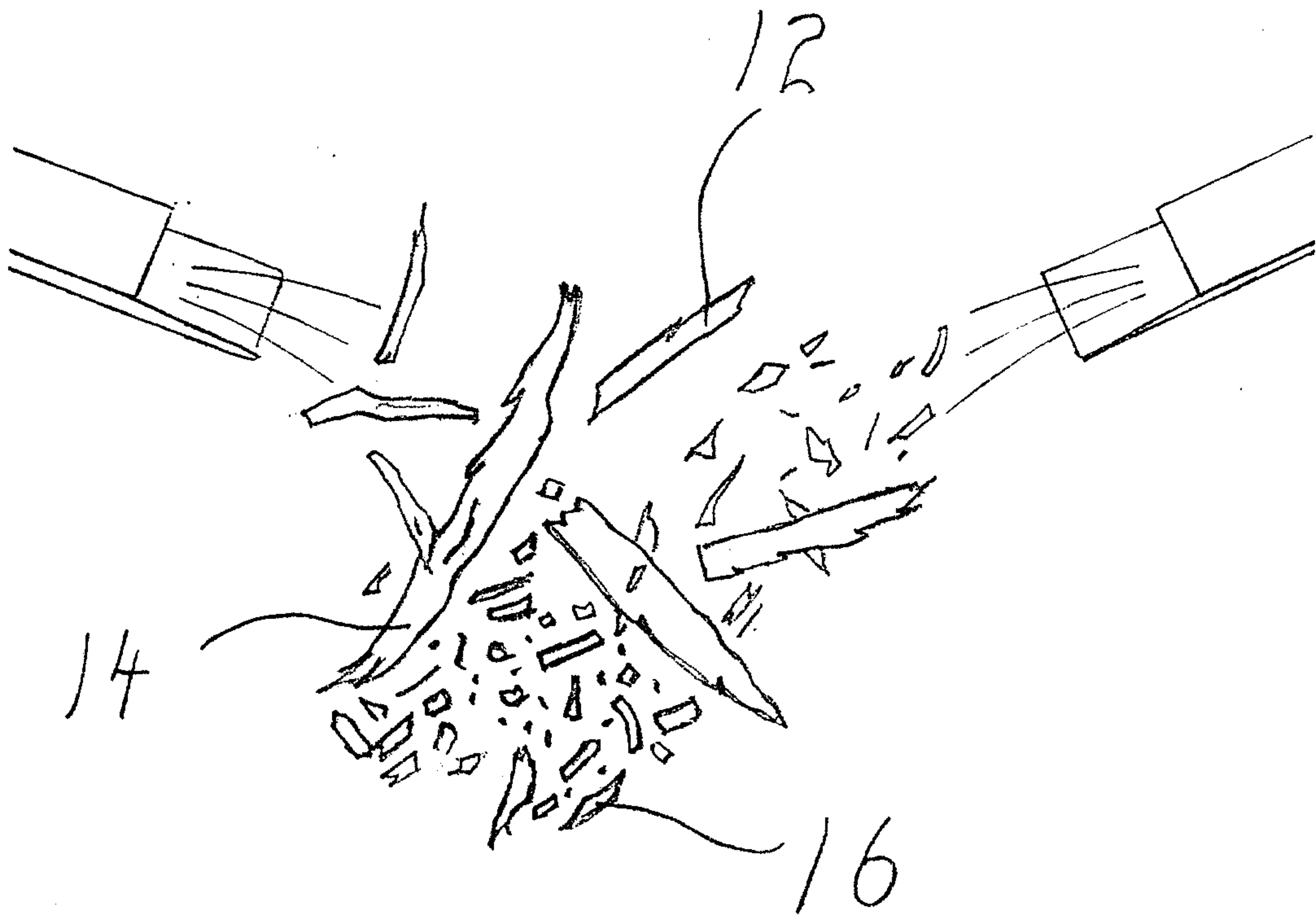


FIG. 3

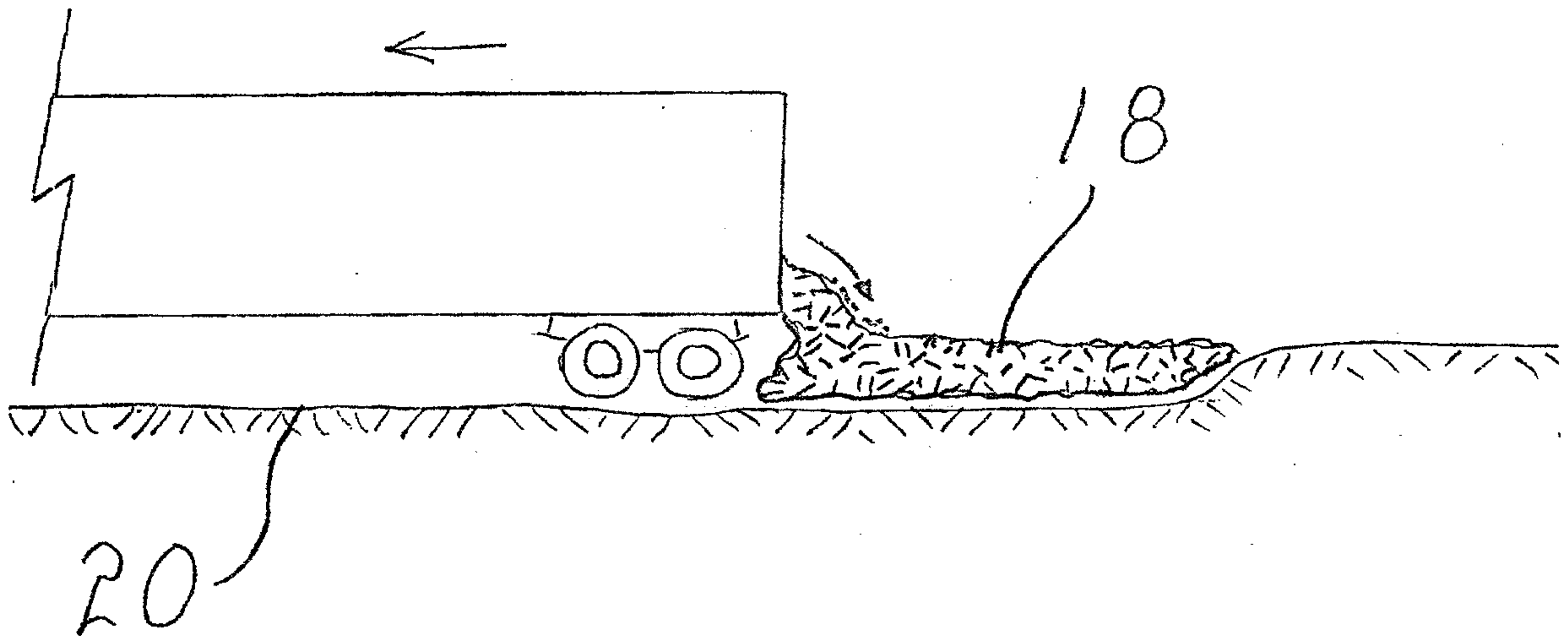


FIG. 4

