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bPaitinní

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Patents
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IE040007

ABSTRACT

This invention relates to a method and apparatus for producing a temporary plaque comprising a two part body, namely a flexible sheet (21) having indicia printed on one face thereof and an adhesive coating on the opposite face thereof, and a rigid mounting plate (19). A template containing information to be printed on a plaque may be printed onto a vinyl flexible sheet using a facsimile machine or a personal computer with associated printer. The vinyl sheet is then attached to the mounting plate by passing the flexible sheet and the mounting plate through a temporary plaque making apparatus (1). A series of resiliently deformable flaps (11,13) act to smooth the flexible sheet out over the rigid mounting plate. The resultant temporary plaque is ideal for mounting on coffins or temporary grave markings. <Figure 1>

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"A Method and Apparatus for Temporary Plaque Manufacture"

This invention relates to a simple and cost efficient apparatus and method for producing a temporary plaque.

For many years, funeral directors otherwise referred to as undertakers, have been providing engraved plaques that are subsequently mounted onto coffins. While one might think that this is a relatively simple and trivial task to carry out in fact this is one of the most time consuming and troublesome tasks encountered by the funeral director. First of all, the funeral director will often have very little time in which to prepare the corpse for burial and having to produce a suitably engraved plaque for the coffin is time consuming and painstaking to carry out when time is already limited.

The act of engraving the plaque is a skilled task that requires a significant amount of time to ensure that the engraving is evenly spaced on the plaque as well as being aligned correctly. The task of engraving may be carried out in some instances by the funeral directors themselves, however this requires the purchase of expensive engraving equipment and otherwise detracts the undertakers from their other duties. Additionally, the engraving of plaques is particularly time consuming for an undertaker who is not sufficiently skilled in this task. Furthermore, the known engraving machines used by undertakers are often limited in the number of characters that they will allow to be engraved on a plaque which will force the undertaker to seek other means of engraving the plaque.

As an alternative to engraving the plaque themselves the funeral directors usually employ a local jeweller who will have the appropriate equipment to engrave the plaque but this has numerous disadvantages. The main disadvantage of having a local jeweller carry out the engraving is that this is expensive to do and adds to the overall costs of the undertaker thereby reducing their profit margins. Another disadvantage of having the local jeweller carry out the engraving is that the engraving will often have to be done at unsociable

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hours thereby increasing the inconvenience to both the local jeweller and the undertaker and increasing the cost to the undertaker.

Therefore there are numerous problems associated with providing a suitably engraved plaque for a coffin. First of all, the cost of having the plaque engraved is relatively high. Secondly, the process of engraving the plaque is both difficult and time consuming to carry out and finally there are numerous logistical problems for the undertaker in ensuring that an engraved plaque can be provided in sufficient time for application to the coffin.

Therefore, it is an object of the present invention to provide an apparatus and a method of producing a plaque that is both simple and cost efficient to carry out while at the same time being less time consuming to carry out.

Statements of Invention

According to the invention there is provided a temporary plaque making apparatus, the temporary plaque comprising a two part body, one part being a substantially rigid mounting plate and the other part being a flexible sheet having indicia printed on one face thereof and an adhesive on the other face thereof suitable for affixing to a front face of the mounting plate, the apparatus comprising a plaque support frame having a pair of substantially parallel slots formed therein, the first slot having a plaque support member and a pressing member housed therein and located on opposite sides thereof, the pressing member further comprising an elongate flap one edge of which is mounted on the plaque support frame and another edge thereof lying adjacent to the plaque support member and biasing means urging the flap towards the plaque support member, the plaque support member being for engagement of one of the mounting plate and the flexible sheet and the pressing member being for engagement of the other of the mounting plate and the flexible sheet so that on a mounting plate and a flexible sheet being passed between the plaque support member and the pressing member, the flexible sheet is brought into engagement with the plaque mounting plate and secured thereto, the second slot being suitably dimensioned to receive a free end of the flexible sheet prior to the flexible sheet and the

mounting plate being passed through the first slot, the flexible sheet having been connected along one exposed portion thereof to the mounting plate and bent back on itself so that the flexible sheet and the mounting plate are substantially in line, the second slot being dimensioned to gradually release the flexible sheet therefrom as the flexible sheet and the mounting plate are passed through the first slot.

By having such an apparatus, a temporary plaque may be produced in a fraction of the time and at a fraction of the expense than the previously known ways. In this way, a plaque may be constructed by simply printing the information about the deceased onto the flexible sheet and then affixing the flexible sheet to a mounting plate which may in turn be mounted onto a coffin. This obviates the need for the funeral director to engrave a plaque and instead the same effect is achieved by simply printing the details of the deceased onto the flexible sheet and then sticking the flexible sheet onto the mounting plate. There will no longer be any need for the undertaker to employ the services of a jeweller and the undertakers costs will be reduced significantly. By having such an apparatus, the flexible sheet may be connected very evenly onto the mounting plate which will reduce the possibility of having any trapped air bubbles between the flexible sheet and the mounting plate or the flexible sheet being misaligned with respect to the mounting plate thereby greatly enhancing the realistic engraving effect produced by the plaque. The plaque will last a sufficient length of time so that it will not degrade in quality prior to the coffin being buried or cremated as the case may be and therefore the apparatus allows a plaque to be produced that will substitute the need to engrave the plaque.

Once the flexible sheet has been affixed to the mounting plate, it will be virtually indistinguishable from an engraved plate. Since the indicia on the plate do not have to last for any particular length of time as burial takes place relatively quickly and the plate will not be exposed to the elements for any great time, this is a more than satisfactory arrangement and leads to a higher quality of plate on the coffin. It also gets over all the problems for the funeral director.

In another embodiment of the invention there is provided a temporary plaque making apparatus in which the first and second slots are offset in a front and back direction with respect to each other and there is further provided an inclined guide surface therebetween for guiding the mounting plate and flexible sheet towards the first slot. This is seen as particularly useful as this configuration encourages the flexible sheet to be drawn across the mounting plate in a steady and even manner. The side of the flexible sheet having an adhesive located thereon will preferably have a disposable paper covering that must be peeled away to expose the adhesive. This orientation of the two slots will help to ensure that the paper covering is peeled off automatically by the motion of the mounting plate and flexible sheet as they pass through the first slot in a controlled manner without exposing the adhesive before it is ready to be applied to the mounting plate. This will in turn prevent the flexible sheet from becoming attached to any other surfaces other than the mounting plate.

In a further embodiment of the invention there is provided a temporary plaque making apparatus in which the pressing member comprises a resiliently deformable flap. This is seen as a particularly simple configuration of apparatus that will be simple and inexpensive to manufacture whilst at the same time remaining effective in use.

In one embodiment of the invention there is provided a temporary plaque making apparatus in which there are provided a plurality of resiliently deformable flaps arranged in a staggered orientation with respect to each other, forming a series of flaps arranged in the direction of travel of the plaque through the slot, the plurality of resiliently deformable flaps partially overlapping in an orientation transverse to the direction of travel of a plaque through the slot. This will prevent excessive force having to be used to pass the mounting plate and flexible sheet through the first slot while at the same time ensuring that no air bubbles are allowed to form between the mounting board and the flexible sheet.

In another embodiment of the invention there is provided a temporary plaque making apparatus as claimed in any preceding claim in which there is provided a friction

reducing plate, mounted on the plaque support member to facilitate through passage of the plaque intermediate the plaque support member and the pressing member. Alternatively, a roller could be mounted on the plaque support member to facilitate through passage of the plaque intermediate the plaque support member and the pressing member. It is envisaged that the pressing member could be coated with a friction reducing coating.

In a further embodiment of the invention there is provided a method of making a temporary plaque of the type comprising a two part body, one part being a substantially rigid mounting plate (5) and the other part being a flexible sheet (7) having indicia printed on one face thereof and an adhesive on the other face thereof suitable for affixing to a front face of the mounting plate (5), the method comprising the steps of:

creating a template containing the information to be displayed on the temporary plaque;

transmitting the template to a printing means;

printing the template onto one face of the flexible sheet, the other face having the adhesive and a suitable backing sheet mounted thereon;

partially removing the backing sheet from one end of the flexible sheet, aligning and then affixing the exposed end of the flexible sheet to the rigid mounting plate;

folding the remainder of the flexible sheet back upon itself in order to bring that section of the flexible sheet and the rigid mounting plate substantially in line;

introducing the free end of the flexible sheet into a slot formed in a plaque support frame of a temporary plaque making apparatus;

gradually returning the flexible sheet back upon itself along its length by introducing the end of the mounting plate with flexible sheet partially affixed thereto into another slot formed in the plaque support frame of the temporary plaque making apparatus, in which slot there are located a pressing member and a plaque support member on opposite sides of the slot; and

passing the mounting plate and the flexible sheet through the first slot between the pressing member and the plaque support member, thereby removing the remaining backing sheet from the flexible sheet and securing the flexible sheet to the mounting plate.

This is seen as a useful way of producing a temporary plaque that will save the undertaker a significant amount of time and expense when it is necessary to provide a plaque. There is no further need to engrave a plaque and therefore the costs associated with engraving are avoided. A high degree of skill to produce the plaque is no longer required. The plaque may be produced in a matter of minutes as opposed to the previous methods which could take several hours to arrange and execute. The template may be created in a quick and efficient manner with the minimum of difficulty. A plaque is produced that is highly realistic yet much quicker to provide. By creating the plaque in this manner, there will be no air bubbles between the flexible sheet and the mounting plate and furthermore the indicia on the plaque will be in alignment with the plaque thereby creating a plaque of very high standard.

In one embodiment of the invention there is provided a method of producing a temporary plaque in which the step of creating a template containing the information to be displayed on a plaque further comprises the step of entering the information into a word processor. This is seen as a quick and efficient way in which the template can be created as various surrounds, borders or pictures of relics may be pre-stored on the word processor that will be able to be used at will when required and will further reduce the amount of time spent producing the plaque.

In another embodiment of the invention there is provided a method of producing a temporary plaque in which the step of transmitting the template to a printing means further comprises transmitting the template to a fax machine. This is seen as a highly desirable way of printing the template onto a sheet as the majority of undertakers will have access to a fax machine on their premises already and no further equipment will be required by the undertaker to print out the template. The flexible sheet, preferably a vinyl sheet having adhesive on one side thereof protected by a disposable paper covering, will pass easily through a fax machine and is particularly suitable for use with this method.

In a further embodiment of the invention there is provided a method of producing a plaque in which the step of printing the template onto a flexible sheet further comprises the step of transmitting the template of the information to be printed on a plaque to a computer printer. This is seen as an alternative to using the fax machine.

In one embodiment of the invention there is provided a method of producing a temporary plaque in which the step of creating a template of the information to be printed on the plaque further comprises the steps of:

relating the information to be printed onto a plaque to a third party in a remote location;

the third party creating the template containing the information to be displayed on the plaque and thereafter the third party transmitting the template containing the information to be displayed on the plaque back to the party producing the plaque.

It is envisaged that the information could be related to the third party by telephone, fax or email and the third party could thereafter relate the information back to the individual creating the plaque by fax, email or any other suitable means. In this way, the undertaker will not have to provide any further specialist equipment and can simply relate the information to a third party who has a word processor or other suitable apparatus at their disposal. The third party may then create the template using their skill and experience for

the undertaker before transmitting the template to the undertaker. It is envisaged that the third party could transmit the template to the party producing the plaque by facsimile. This will allow the template to be printed directly onto a flexible sheet in the undertaker's premises without the need for further printing to be undertaken. Alternatively, the third party transmits the template to the party producing the plaque by email. The undertaker could thereafter print the template on a computer printer or by other suitable means.

Detailed Description of the Invention

The invention will now be more clearly understood from the following description of some embodiments thereof given by way of example only in which:-

Fig 1 is a perspective view of an apparatus according to the invention;

Fig 2 is a cross-sectional view of the apparatus of Fig 1 along the lines A-A;

Figs 3(a) to 3(f) inclusive are cross-sectional views of the apparatus of Fig 1 along the lines A-A showing sequentially the steps of applying a flexible sheet to a mounting plate to produce a plaque; and

Fig 4 is a block diagram of a system in which the method according to the invention may be carried out.

Referring to the drawings and initially to Figs 1 and 2 thereof there is shown a temporary plaque making apparatus, indicated generally by the reference numeral 1, comprising a plaque support frame 3 having a pair of substantially parallel slots 5, 7 formed therein. The top face of the first slot 5 forms a plaque support member 9, while mounted on the bottom face of the first slot 5 there is a pressing member, here provided in the form of a pair of flaps 11, 13. One edge of the flaps is mounted on the plaque support frame while the other edge 15, of the flaps lies adjacent the plaque support member 9. The first and second slots 5, 7 respectively, are offset in a front and back direction with respect to each

other and there are further provided an inclined guide surface 17 therebetween for guiding a mounting plate 19 and flexible sheet 21 towards the first slot 5. The flaps 11, 13 and the plaque support member 9 cooperate so that when a mounting plate 19 and a flexible sheet 21 are passed therebetween, the flaps 11, 13 act on one of the flexible sheet 21 and the mounting plate 19 while the plaque support member 9 acts on the other of the flexible sheet 21 and the mounting plate 19 to bring the flaps 11, 13 and the mounting plate 19 into engagement with each other and secure them together.

The flaps 11, 13 are formed from a resiliently deformable material and therefore will be biased towards the plaque support member. The edges 15 of the flaps will deform and deflect away from the plaque support member 9 to allow a mounting plate and flexible sheet to pass therebetween and will return to their rest position once the mounting plate and flexible sheet have passed through the slot.

Referring to Figs 3(a) to 3(f) inclusive there is shown a cross sectional view of the sequential steps involved while using the apparatus. Prior to introducing a flexible sheet 21 and a mounting plate 19 to the apparatus, indicia, which may include writing, icons or other information is printed onto the flexible sheet in a manner that will be more fully described later in this specification. The flexible sheet having indicia printed thereon is taken and a part of the side of the flexible sheet which has adhesive thereon is exposed by peeling away part of a backing strip. Preferably, the backing strip will have been pre-scored to allow portion of the backing strip to be removed cleanly. The exposed part of the flexible sheet is aligned carefully with the edge of the mounting plate. The remainder of the flexible sheet is then bent back upon itself into the position where the flexible sheet and the mounting plate are substantially in line with each other, as shown in Fig 3(a). The flexible sheet is inserted into slot 7 as far as possible until the mounting plate 19 comes into contact with the inclined surface 17 (Fig 3(b)). The mounting plate is then gradually slid upwards along the inclined surface 17 towards the slot 5 and the flaps 11, 13 located therein (Fig 3(c)) until the mounting plate and the flexible sheet abut against the plaque support member 9 and the resiliently deformable flap 11 respectively (Fig 3(d)). As the mounting plate and the flexible sheet rise gradually up the inclined surface 17, the

backing strip 23 gradually peels off from the side of the flexible strip having the adhesive thereon. The mounting plate and the flexible sheet are pushed against the flap 11 which deforms while at the same time maintaining pressure against the flexible material pressing it against the mounting plate (Fig 3(e)). Finally, at Fig 3(f), the mounting plate and the flexible sheet are pulled completely through the slot 5 with the mounting plate and the flexible sheet in engagement thereby forming the temporary plaque. The temporary plaque formed in this way will be robust and there will be no air bubbles between the mounting plate and the flexible sheet thereby further enhancing the appearance of the plaque.

Referring to Fig 4 of the drawings there is shown a block diagram of a system in which the method according to the invention may be performed. The undertaker will have at their disposal the use of a temporary plaque making apparatus 1, a telephone 41, and a facsimile machine 43. In the embodiment shown the undertaker is additionally provided with a personal computer 45 and computer printer 47. The telephone 41, the personal computer 45 and the facsimile machine 43 are connected through communications network 49 to a template creation agent 51 who will also have at his disposal a telephone 53, a personal computer 55, a computer printer 57 and a facsimile machine 59. In use, the undertaker will obtain the information to be displayed on the plaque from a relative (not shown) of the deceased. The undertaker will then contact the template creation agent by telephone, email or facsimile if preferred and will relay the details to be displayed on the plaque to the template creation agent. The template creation agent will then create a suitable template containing the information to be displayed on the temporary plaque using a suitable word processor loaded on personal computer 55. Once the template is ready, the template is transmitted to the undertaker by fax or email if desired. If the template is faxed to the undertaker, the fax machine will have been preloaded with a suitable vinyl applicator sheet having an adhesive on one side thereof covered with a backing sheet. The template will be printed onto the vinyl sheet by the fax machine. The vinyl sheet will then be attached to the mounting plate in the manner as previously described above.

It will be understood that the undertaker could have either of the fax machine and the personal computer and printer combination at their disposal. What is important is that they have some way of printing out a template onto a flexible sheet. It will be further understood that in certain cases, such as when the undertaker has the use of a personal computer they may decide that they wish to produce the template themselves and they will not have to relay the details of the deceased to a template creation agent to create the template for them. In some instances, they may have the personal computer at their disposal but still would prefer to have the template creation agent who is familiar with creating templates carry out this operation for them.

In the embodiment of temporary plaque making apparatus described the flaps are described as being resiliently deformable. This allows the flaps to be biased towards the plaque support member. It will be understood by the person skilled in the art that instead of having resiliently biased flaps, alternative flaps having a separate biasing means to bias the flaps towards the plaque support member could be provided and would function adequately. The edges 15 of the flaps are further said to lie adjacent to the plaque support member 9 and it is envisaged that the flaps may be long enough so that they may in fact be in contact with the plaque support member. The flaps will be sufficiently long enough to ensure that the distance between the edges of the flaps will be less than the width of the mounting plate, this will ensure that there is a firm engagement of the flexible sheet and the mounting plate as they pass between the flaps and the plaque support member.

In the embodiment shown, there are provided a pair of flaps in series in the direction of travel of the plaque through the slot 5. It is envisaged that a single flap may be used or alternatively, more than two flaps may be used depending on how much pressure is required to ensure a firm and clean engagement between the flexible sheet and the mounting plate. The edges 15 of the flaps are preferably parallel to each other and may be perpendicular to the direction of travel of the plaque through the slot 5 or could be offset at an acute angle to the perpendicular to assist in a clean application of the flexible sheet onto the mounting plate and obviate the possibility of having trapped air bubbles formed therebetween. The flaps may be formed in a staggered configuration with the inner ends

of the flaps overlapping with the inner end of the other flap. Preferably though, the first flap 11 encountered by a temporary plaque passing through the slot will be located centrally in the slot and will not extend the entire distance across the slot whereas the second flap 13 will extend across the entire slot. This will help to ensure that the center of the flexible sheet is attached to the mounting plate before the remaining edges as this will help avoid any air bubbles from appearing between the flexible sheet and the mounting plate.

In the embodiment shown the inclined guide surface 17 extends upwardly from the second slot 7 and projects into the first slot 5. As an alternative, the inclined guide surface may terminate once it reaches the first slot. In this instance, the first flap may be positioned substantially flush with the inclined surface thereby acting as a continuation of the inclined surface to guide the mounting plate and flexible sheet upwardly to a position intermediate the flap 11 and the plaque mounting plate 9.

Finally, the plaque support member could be provided with a friction reducing plate to facilitate through passage of the plaque intermediate the plaque support member and the pressing member. As an alternative to the friction reducing plate a roller could be provided. Furthermore, the flaps could themselves be provided with a friction reducing coating.

In this specification the terms "comprise, comprises, comprised and comprising" and the terms "include, includes, included and including" are deemed totally interchangeable and should be awarded the widest possible interpretation.

The invention is in no way limited to the embodiments hereinbefore described but may be varied in both construction and detail with in the scope of the claims.

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Claims

(1) A temporary plaque making apparatus, the temporary plaque comprising a two part body, one part being a substantially rigid mounting plate and the other part being a flexible sheet having indicia printed on one face thereof and an adhesive on the other face thereof suitable for affixing to a front face of the mounting plate, the apparatus comprising a plaque support frame having a pair of substantially parallel slots formed therein, the first slot having a plaque support member and a pressing member housed therein and located on opposite sides thereof, the pressing member further comprising an elongate flap one edge of which is mounted on the plaque support frame and another edge thereof lying adjacent to the plaque support member and biasing means urging the flap towards the plaque support member, the plaque support member being for engagement of one of the mounting plate and the flexible sheet and the pressing member being for engagement of the other of the mounting plate and the flexible sheet so that on a mounting plate and a flexible sheet being passed between the plaque support member and the pressing member, the flexible sheet is brought into engagement with the plaque mounting plate and secured thereto, the second slot being suitably dimensioned to receive a free end of the flexible sheet prior to the flexible sheet and the mounting plate being passed through the first slot, the flexible sheet having been connected along one exposed portion thereof to the mounting plate and bent back on itself so that the flexible sheet and the mounting plate are substantially in line, the second slot being dimensioned to gradually release the flexible sheet therefrom as the flexible sheet and the mounting plate are passed through the first slot.

(2) A temporary plaque making apparatus as claimed in claim 1 in which the first and second slots are offset in a front and back direction with respect to each other and there is further provided an inclined guide surface therebetween for guiding the mounting plate and flexible sheet towards the first slot.

(3) A temporary plaque making apparatus as claimed in claim 1 or 2 in which the pressing member comprises a resiliently deformable flap.

(4) A temporary plaque making apparatus as claimed in claim 3 in which there are provided a plurality of resiliently deformable flaps arranged in a staggered orientation with respect to each other, forming a series of flaps arranged in line in the direction of travel of the plaque through the slot, the plurality of resiliently deformable flaps partially overlapping in an orientation transverse to the direction of travel of a plaque through the slot.

(5) A temporary plaque making apparatus as claimed in any preceding claim in which there is provided a friction reducing plate, mounted on the plaque support member to facilitate through passage of the plaque intermediate the plaque support member and the pressing member.

(6) A temporary plaque making apparatus as claimed in any of claims 1 to 5 in which there is provided a roller mounted on the plaque support member to facilitate through passage of the plaque intermediate the plaque support member and the pressing member.

(7) A method of making a temporary plaque of the type comprising a two part body, one part being a substantially rigid mounting plate (5) and the other part being a flexible sheet (7) having indicia printed on one face thereof and an adhesive on the other face thereof suitable for affixing to a front face of the mounting plate (5), the method comprising the steps of:

creating a template containing the information to be displayed on the temporary plaque;

transmitting the template to a printing means;

printing the template onto one face of the flexible sheet, the other face having the adhesive and a suitable backing sheet mounted thereon;

partially removing the backing sheet from one end of the flexible sheet, aligning and then affixing the exposed end of the flexible sheet to the rigid mounting plate;

folding the remainder of the flexible sheet back upon itself in order to bring that section of the flexible sheet and the rigid mounting plate substantially in line;

introducing the free end of the flexible sheet into a slot formed in a plaque support frame of a temporary plaque making apparatus;

gradually returning the flexible sheet back upon itself along its length by introducing the end of the mounting plate with flexible sheet partially affixed thereto into another slot formed in the plaque support frame of the temporary plaque making apparatus, in which slot there are located a pressing member and a plaque support member on opposite sides of the slot; and

passing the mounting plate and the flexible sheet through the first slot between the pressing member and the plaque support member, thereby removing the remaining backing sheet from the flexible sheet and securing the flexible sheet to the mounting plate.

(8) A method of producing a temporary plaque as claimed in claim 7 in which the step of creating a template containing the information to be displayed on a plaque further comprises the step of entering the information into a word processor.

(9) A method of producing a temporary plaque as claimed in claim 7 or 8 in which the step of transmitting the template to a printing means further comprises transmitting the template to a fax machine.

(10) A method of producing a temporary plaque as claimed in claim 7 or 8 in which the step of transmitting the template to a printing means further comprises transmitting the template to a computer printer.

(11) A method of producing a temporary plaque as claimed in any of claims 7 to 10 in which the step of creating a template of the information to be printed on the plaque further comprises the steps of:

relating the information to be printed onto a plaque to a third party in a remote location;

the third party creating the template containing the information to be displayed on the plaque and thereafter the third party transmitting the template containing the information to be displayed on the plaque back to the party producing the plaque.

(12) A temporary plaque making apparatus substantially as hereinbefore described with reference to the accompanying drawings.

(13) A method of producing a temporary plaque substantially as hereinbefore described with reference to the accompanying drawings.

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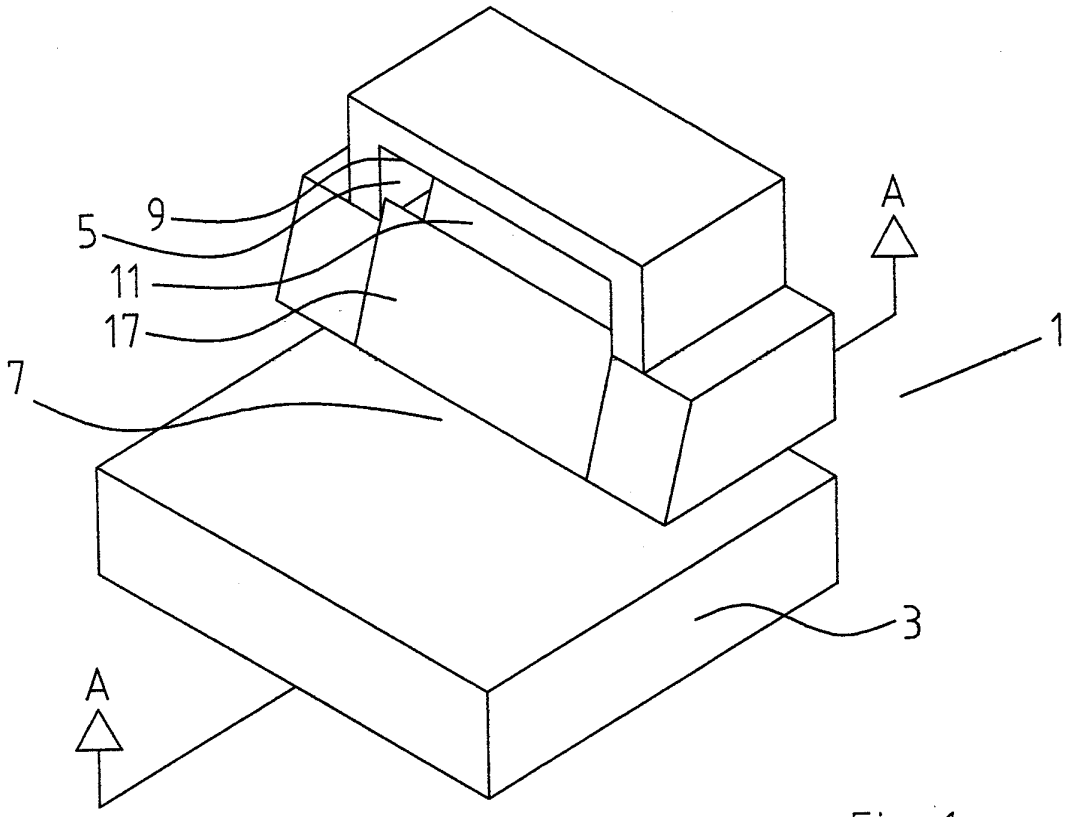


Fig. 1

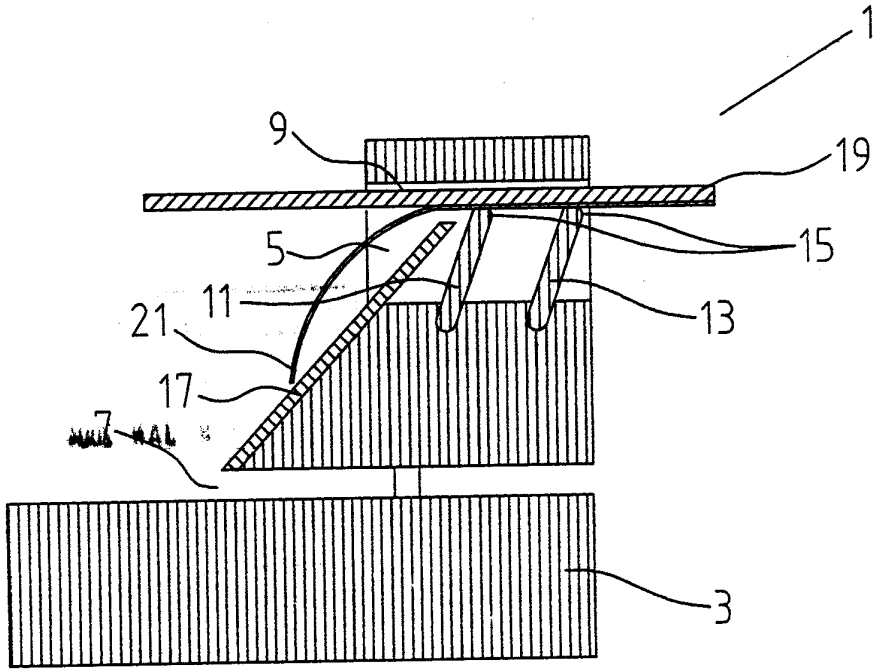


Fig. 2

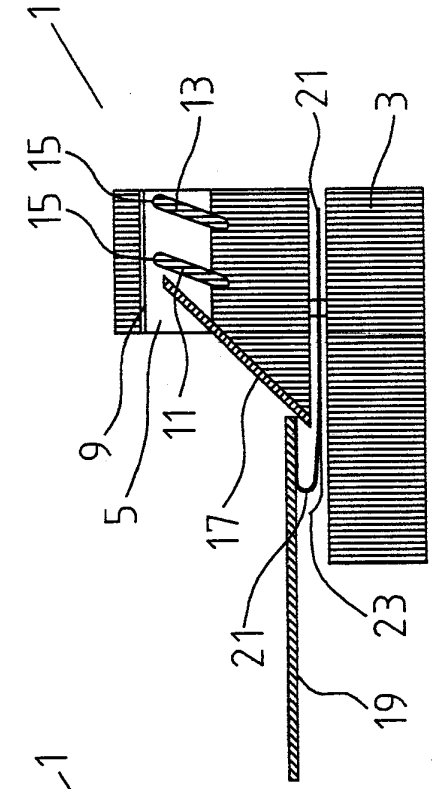


Fig. 3(b)

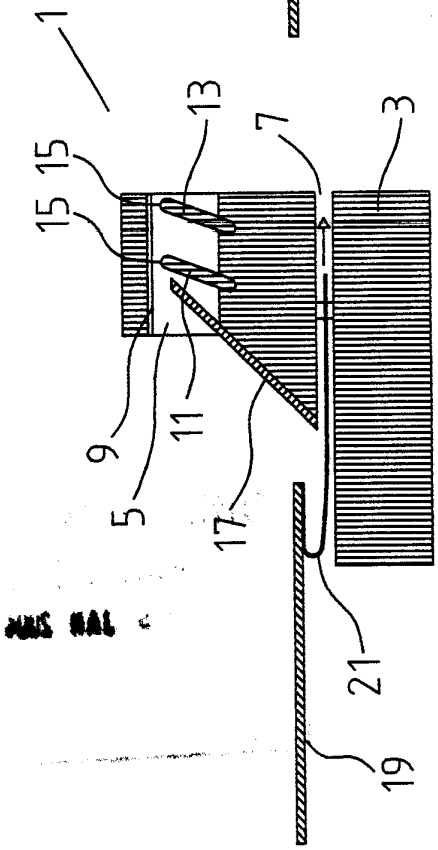


Fig. 3(a)

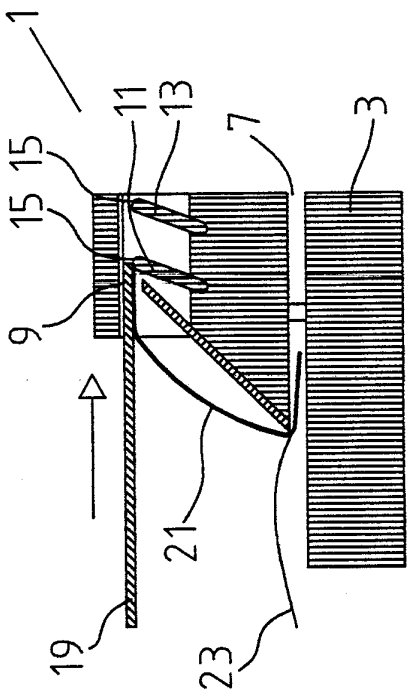


Fig. 3(d)

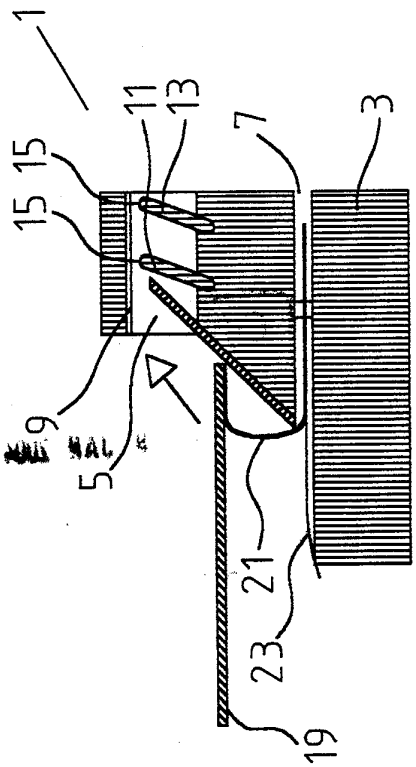


Fig. 3(c)

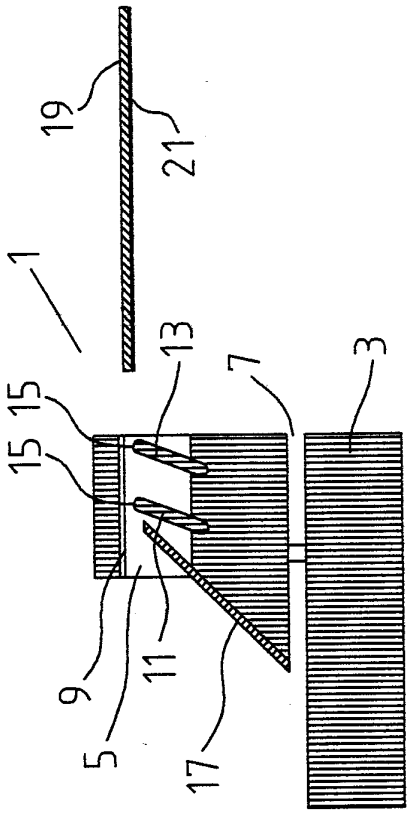


Fig. 3(f)

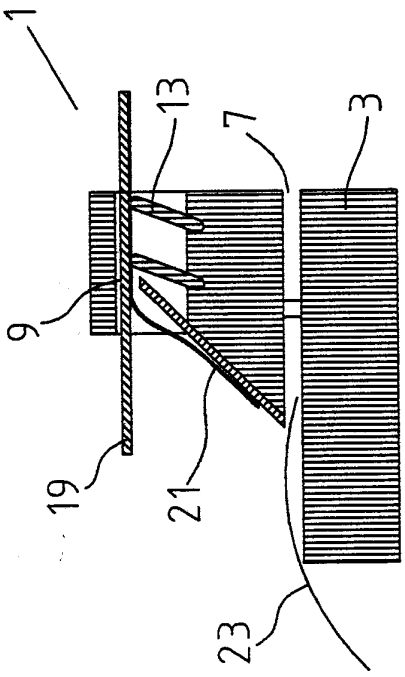


Fig. 3(e)

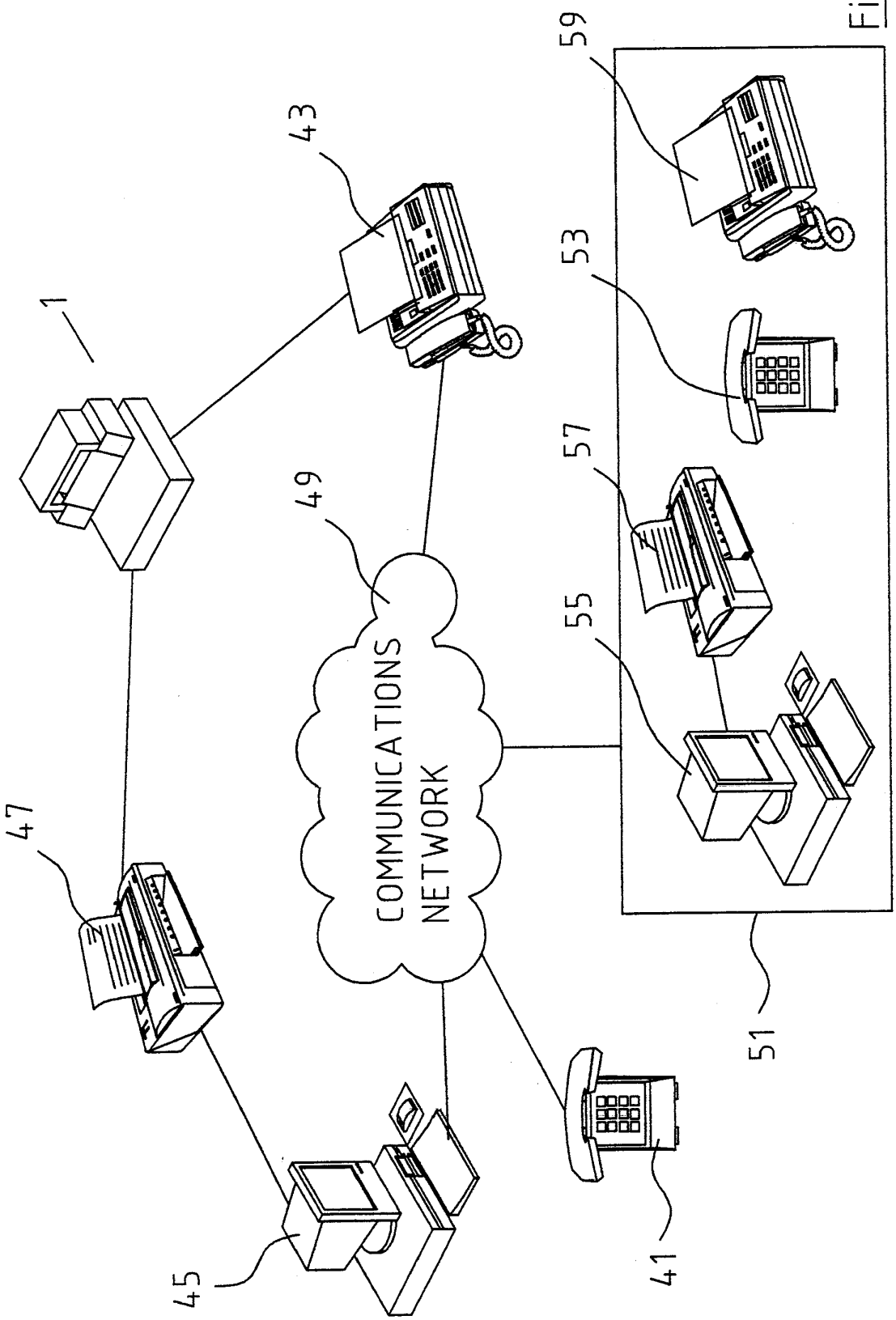


Fig. 4