

[54] **METHOD OF REMINDING AND APPARATUS FOR ITS PRACTICE**

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[22] Filed: **Dec. 10, 1974**

[21] Appl. No.: **531,276**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 391,421, Aug. 24, 1973.

[52] U.S. Cl. **340/272; 340/326**

[51] Int. Cl.² **G08B 13/10**

[58] Field of Search **340/326, 330, 272**

[56] **References Cited**

UNITED STATES PATENTS

3,360,791 12/1967 Lazar 340/332

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Attorney, Agent, or Firm—David H. Semmes

[57] **ABSTRACT**

A method, and the apparatus for its practice, of automatically reminding a person to wipe his or her feet at the entrance to a home or establishment, including employing a visual sign, with or without an audible signal, with switch means to strikingly present a lighted message proximate to the doorway. The method is operable either by an inhabitant or a visitor, the context of the sign effectively inducing the person to perform the act of wiping his feet prior to entrance. Furthermore, this method innocuously and automatically reminds either an inhabitant or visitor of the necessity of wiping his or her feet without any verbal intervention by the party interested in the performance of this social grace.

15 Claims, 4 Drawing Figures

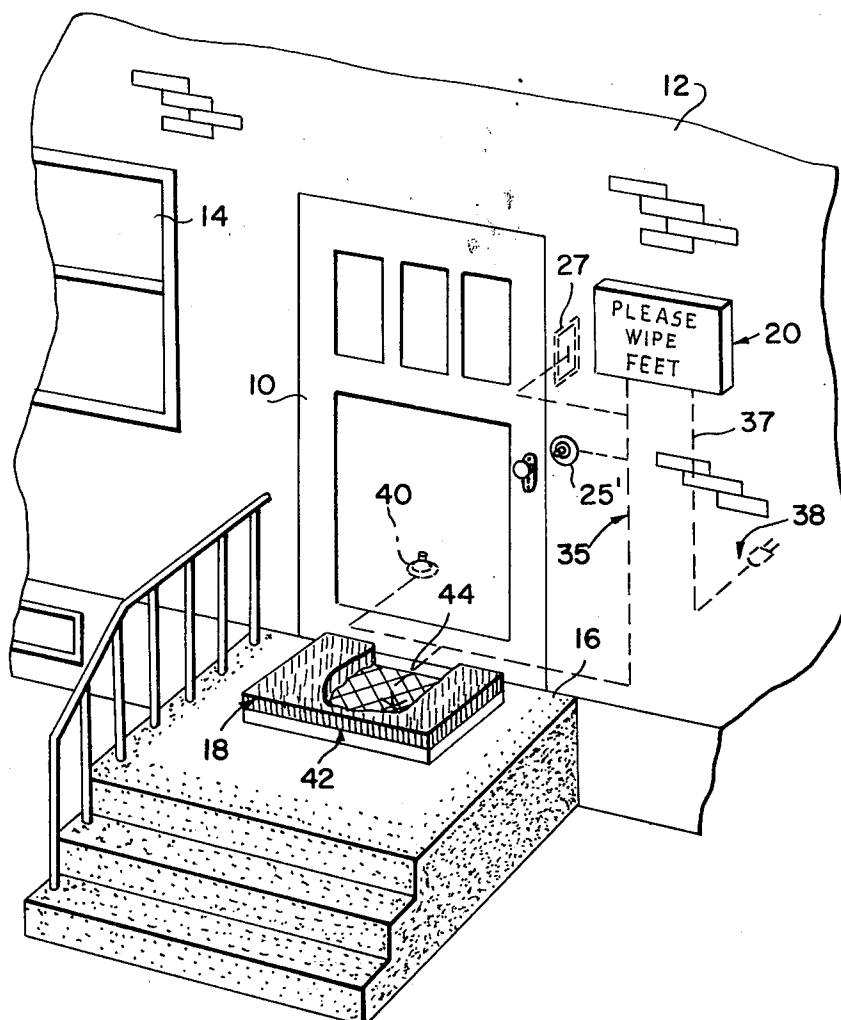


FIG. 1

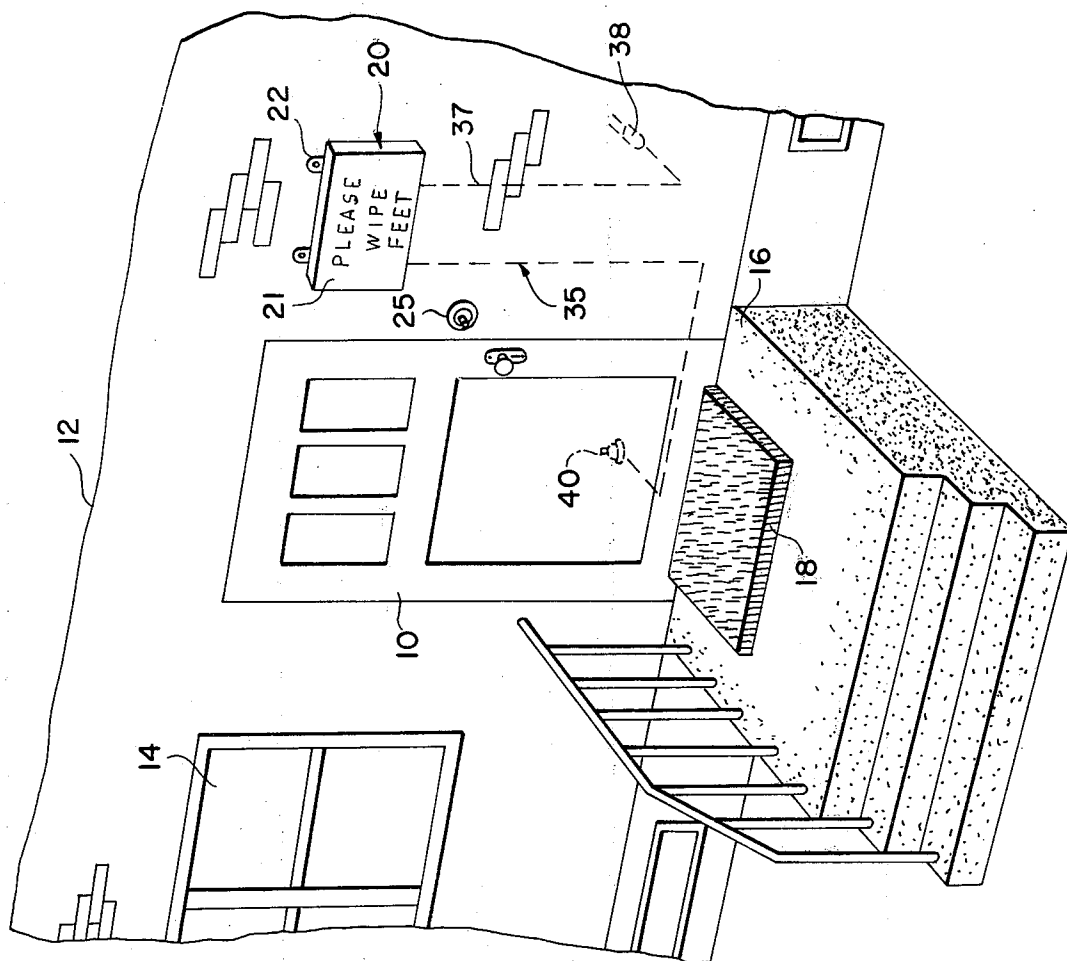
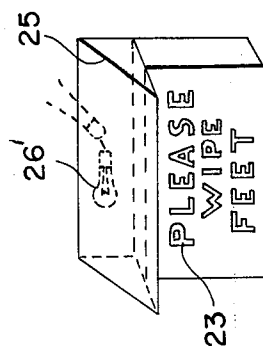


FIG. 4



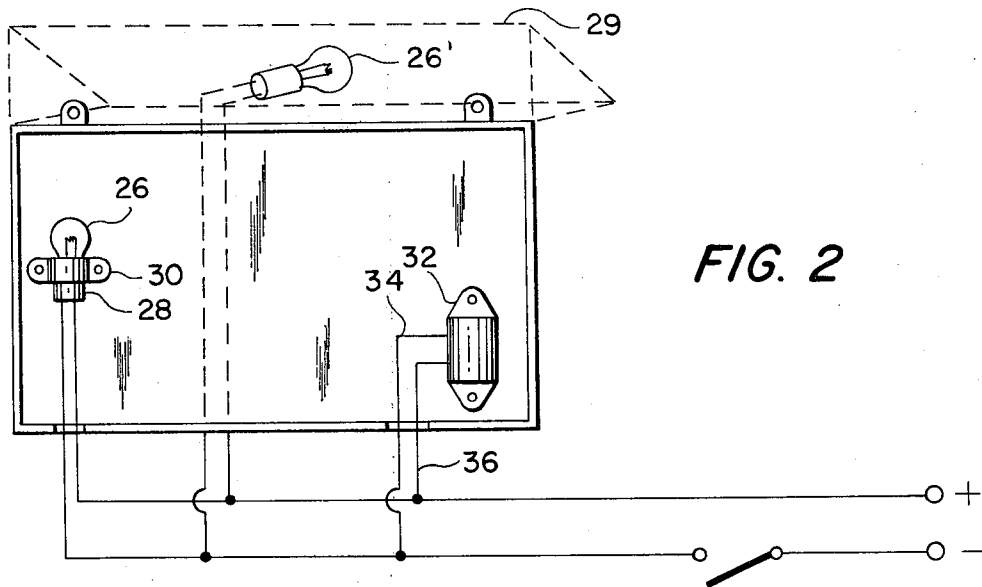
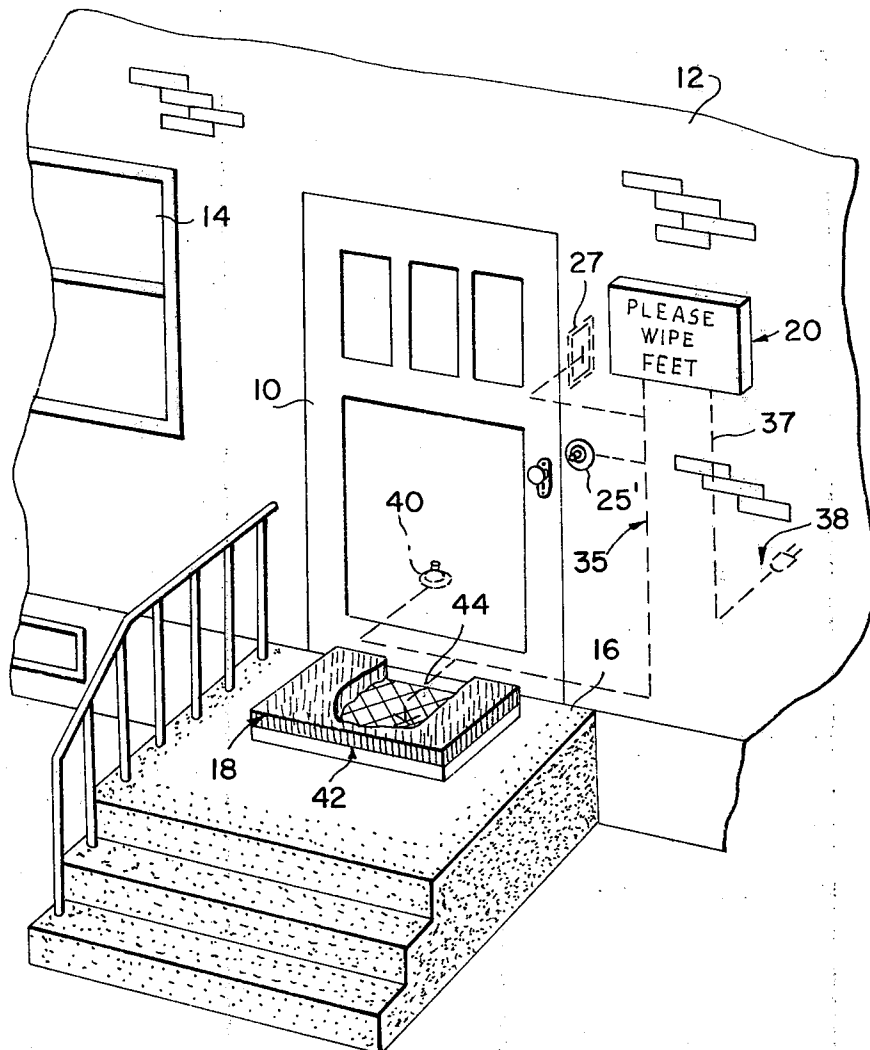


FIG. 3



METHOD OF REMINDING AND APPARATUS FOR ITS PRACTICE

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation-in-part of my copending application Ser. No. 391,421, filed Aug. 24, 1973 and entitled AUTOMATIC REMINDER.

BACKGROUND OF THE INVENTION

The apparatus according to this invention employs a sign, with audible attention getting means as required, at the exterior of a home or establishment which automatically or selectively operates to visually present to a visitor the message "Please Wipe Feet," in order to save the trouble and embarrassment of repeated verbal admonishments. Such an apparatus employed according to the methodology taught herein will greatly assist a homeowner to maintain the condition of his interior carpets or the like.

The long-felt need for such an automated method of notification to those approaching a carpeted dwelling, or establishment, may instantly be appreciated by an inspection of the carpeting in most homes and establishments. This invention answers that long-felt and unsolved need by identifying, and taking advantage of, the root cause of the problem. There is a latent sense of responsibility, or social awareness, present in virtually all human beings. While anyone possessing even the minimal of the social graces is conscious of the necessity of wiping one's feet upon entering a dwelling, due to inadvertence this simple courtesy is often unconsciously overlooked. The embarrassment and continual annoyance, to the proprietor of the home or establishment, which would accrue from repeated personal verbal admonishments are either to great to bear, or else contradicted after a simple consideration of public relations. This invention identifies and solves the total problem by taking advantage of both reflex action as well as the Pavlovian-type responses available within most human beings when confronted by a sufficiently immediate, if not startling, stimulus.

The type of circuitry and switch means is notoriously well-known for the purpose of actuating a door sign or other such device upon the approach of a visitor, as shown by U.S. Pat. Nos. 3,360,791 and 2,783,327. However, there is no known recognition in the prior art that the specific yet universal problems resulting from uncleared feet crossing a doorway can be remedied through the employment of an automatic or selectively operated visual reminder. Therefore, it is an object of the present invention to answer this long-felt and, up until this time, unsolved need of occupants of homes and establishments with an automatic, non-verbal means to help maintain the condition of carpeting, or the like, on their respective floors.

It is a further object of this invention to provide a method which will immediately reinforce, in the average human being, the desirable social grace of wiping one's feet before entry into a home or establishment.

It is yet a further object of this invention to provide an electrical apparatus which will inexpensively and efficiently perform the function of admonishing visitors and inhabitants of homes or establishments without the need of the constant personal admonishments on the part of the interested parties within the dwelling.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary perspective view showing one possible positioning of the automatic reminder apparatus of the present invention;

FIG. 2 is a schematic showing, in somewhat greater detail, the structure and operating components according to two embodiments of the invention;

FIG. 3 is a composite perspective view showing alternate switching means which may be employed to actuate the reminder according to this invention;

FIG. 4 is a structural modification of the sign component of the invention.

Referring now in more detail to the drawings, in FIG. 1 there is shown an entrance door to a home, establishment, or other building, fragmentarily shown at 12, and having, for example, a window such as at 14 and an entrance porch or stoop 16. As is usual practice at such an entranceway, a doormat 18, well adapted for wiping one's feet, is placed on the porch proximate to the entranceway.

The automatic reminder circuitry which is employed to perform the method according to the present invention is capable of either automatically or selectively reminding people to wipe their feet on the mat before entering and walking upon the interior carpeting or the like. By having a circuit, as herein disclosed, the proprietor or owner of the dwelling is saved the annoyance, and inevitable embarrassment, which is attendant to verbally reminding each and every visitor to wipe his feet before entering. At this point it should be noted that passive signs, or other such passive systems, which rely on human interpretation and conscious reaction have in the past been widely employed to urge people to adopt various accepted social graces—such as wiping one's feet before entering a dwelling. However, as can be seen in any dwelling that one may wish to inspect, the efficacy of such passive admonishments is at best questionable. According to the present methodology, as implemented by the presently disclosed apparatus, this invention teaches a method, and the apparatus for its practice, which capitalizes upon an involuntary reflex action; the wiping of one's feet in response to a sudden stimuli.

This desirable social behaviour pattern is accomplished, according to a preferred embodiment of the present invention, by employing a visual message presenting means 20, of wood or metal, which is itself provided with mounting brackets 22 to allow simple installation upon such a wall surface as is shown in FIG. 1 to be adjacent and immediate proximate to an entranceway or door 10. The front surface of the box may be conveniently constructed either with a perforated rendition, in a plate, of the letters comprising the message, as illustrated in FIG. 1 at 21, or alternatively, the message may be spelled out with bright, or fluorescent, lettering as illustrated at 23 in FIG. 4. If the lettering is fluorescent, an external lighting means may be employed as schematically illustrated in FIG. 4 at 31. In any event, the essential criterion for this visual message presenting means is that it be proximate to an entranceway, and associated mat, and also highly visible to one approaching the entranceway when at the point of actual entry through the entranceway itself. The proximate location of the sign is rather critical, since the entire methodology of the instant invention depends upon a reflex, or "knee-jerk", reaction on the part of the visi-

tor to the sudden stimulus he receives as will hereinafter be more particularly explained.

Mounted interiorly of the box 20 may be a buzzer 32 or other audible sound emitting device. Electric lead 34 and 36 from buzzer 32 are conventionally interconnected with the lamp 26 having an electric plug and socket arrangement and mounted in a conventional fashion as shown more clearly in FIG. 2. The lamp itself may be either mounted to the back of the box with a strap 30 or, alternatively, as shown in dotted lines in FIG. 2, a hood 9 may allow for frontal lighting of a fluorescent rendition of a "Please Wipe Feet" message, with the bulb 26' thusly protected from the elements. Such constructional features of the circuit are of course well known and do not, per se, form part of the inventive concept herein disclosed.

From an inspection of FIG. 1 it can be seen that there is a electric signal generating or switching line, illustrated schematically as 35 which broadly functions as the switch or generating means for the circuitry. The reminder system according to this invention is schematically shown as having a power supply line 37 having, conveniently, a conventional plug 38.

The invention may now be explained by illustration with reference to FIG. 1. When a visitor approaches and rings a door bell, illustrated by numeral 25, or knocks on the door or otherwise indicates his presence, he is constrained to stand upon mat 18. Another person, within the entranceway, will step upon foot switch 40, which is placed within the dwelling proximate to the door, when coming toward the entranceway in response to the visitor's presence. This action on the part of the inhabitant of the dwelling generates an electrical signal in control circuit line 35 and results in an illumination of the sign 20 and, optionally, actuation of buzzer system 32 to generate an audible signal to ensure that requisite stimulation to the visitor's conscious and/or subconscious mind which will cause him to involuntarily begin a reflex or "knee-jerk" activity—wiping his feet on mat 18. It may be noted that, to enhance the stimulation, the visual message presenting means 20 may incorporate an interrupter circuit to induce a rapidly blinking illumination of the sign. This sudden assault on the senses—and the sensibilities—of the visitor initiates an involuntary response on the part of the visitor; without thinking, he immediately begins to rapidly shuffle his feet upon the mat 18, thus cleaning them of dirt, or any foreign material, which would most certainly be injurious to the carpeting, or the like, located within the entranceway. In this first embodiment, the initiation or actuation of this striking stimulus to the nervous system of the visitor is illustrated to be the involuntary act of the one answering the door. It should be noted that one so answering the door has not found it incumbent upon himself to verbally admonish the visitor to wipe his feet, since the visitor has already been automatically and rather strikingly induced to perform the act of wiping his feet. It is important to note that the mat 18 must be proximate to the doorway, as well as proximate to the bell 25, so that he will be in position to clean the soles of his shoes by his involuntary "knee-jerk" reaction at that particular place.

In the composite embodiment shown in FIG. 3 there is employed a treadle, or walk-on, switch generally designated at 42 which is positioned directly underneath the mat 18. The treadle switch generates an electrical signal in response to the weight of the visitor, and may

be either serially or in parallel connection with, for example, interior foot switch 30 and/or any other initiating circuitry as will be hereinafter discussed. The particular means used to close the circuitry which will illuminate the message, PLEASE WIPE FEET, must only be proximate to the doorway and actuatable by the involuntary or selective act of either a visitor or an inhabitant of the dwelling. In this respect, a manually operable interior switch 27 may also be provided on control line 35, to allow an inhabitant to override the automatic selective actuation. For example switch 27 may be used to activate the message either continuously or intermittently, when giving a party and there is a particularly constant flow of people into and out of the door. As can also be seen in FIG. 3, a conventional doorbell 25 may be replaced with another doorbell 25', which by virtue of having another set of contacts, not illustrated, is operable to simultaneously energize the reminder message with the ringing of a conventional door chime within the dwelling.

At this point it should be noted that this reminder to wipe one's feet is also effective with frequent inhabitants of the dwelling, such as children. Even though a child would quickly become familiar with the admonition electrically thrust upon him to wipe his feet, his continued response to this admonition would be assured by the suddenness of the reminder whenever actuated. In other words even to frequent inhabitants, with familiarity with the visual message previous stimulations will induce a Pavlovian-type response, wherein a child, or other frequent inhabitant, finds himself involuntarily wiping his feet with stepping upon any mat! Hence, unlike a passive sign, for example, which may be unconsciously or even studiously avoided by merely averting one's eyes whenever approach is made towards an entranceway, the sensory dominance of the instant reminder system ensures a reflex or "knee-jerk" wiping of one's feet. Furthermore, it induces or promotes in an inhabitant the desired social grace of wiping one's feet upon arriving at any entranceway.

Manifestly, minor changes in details can be effected without departing from the spirit and scope of the methodology taught herein, and it is therefore to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

I Claim:

1. The method of inducing one arriving at an entranceway to wipe one's feet on a mat, proximate and exterior to said entranceway, comprising the steps of:

- A. locating a mat exterior and proximate to an entranceway into a building structure, and;
- B. generating, by electrical circuit means, an electrical signal in response to the presence of one standing upon said mat, and;
- C. transmitting said electrical signal to a visual message presenting means mounted on an exterior wall of said building, proximate said entranceway, and;
- D. illuminating, at said visual message present means, a visual message, said message comprising the wiping of one's feet, in response to said generated signal.

2. The method of claim 1 wherein said signal means is generated by sensing the arrival of another person, within the said building, at the interior of said entranceway.

5

3. The method of claim 1 wherein said signal is generated by the weight of said one upon said mat.

4. The method of claim 1 wherein said signal is generated by the actuation of a doorbell mounted exterior to said building and proximate to said doorway.

5. The method of claim 1 wherein said generated electrical signal also actuates audible signal means within said visible message presenting means.

6. The method of claim 1 wherein said illumination is an external illumination of fluorescent letters comprising said message.

7. The method of claim 1 wherein said illumination is through a plate, said plate having perforations comprising letters of said message.

8. An automatic reminder to induce one, proximate and exterior to an entranceway, to wipe one's feet, comprising:

A. a mat located exterior and proximate to an entranceway, and;

B. electrical signal generating means activated in response to the presence of one upon said mat, and;

C. electrical circuit means interconnecting said signal generating means to a visual message presenting means proximate said entranceway, and;

D. said visual message presenting means further comprising illuminating means to illuminate a visual message, comprising the wiping of one's feet, in response to a signal generated by said signal generating means.

6

9. The automatic reminder of claim 8 wherein the electrical signal generating means further comprises a means responsive to the arrival of another person at the interior side of said entranceway.

10. The automatic reminder of claim 8 wherein the electrical signal generating means further comprises a means directly responsive to the weight of said one upon said mat.

11. The automatic reminder of claim 8 wherein the electrical signal generating means further comprises a means responsive to the actuation of a doorbell, exterior to said building and proximate to said entranceway.

12. The automatic reminder of claim 8 wherein the visual message presenting means further comprises an audible signal means responsive to said generated electrical signal.

13. The automatic reminder of claim 8 wherein said illuminating means comprises a direct illumination of fluorescent letters comprising said message.

14. The automatic reminder of claim 8 wherein said illuminating means comprises an illumination through a plate having perforations for defining letters comprising said message.

15. The automatic reminder of claim 8 wherein the specific message illuminated is comprised by the letters PLEASE WIPE FEET.

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