A combination snow removal tool and snow shovel including an elongated handle having an ice scraper attached to one end thereof, a snow brush having sets of bristles extending transversely outwardly from the opposite end of thereof, and a shovel adapted for removable interconnection to the ice scraper.
COMBINATION SNOW SHOVEL AND SNOW REMOVAL TOOL

BACKGROUND OF THE INVENTION

[0001] The present invention relates generally to tools used in connection with snow and ice removal from automobiles, and more particularly to such tools having a snow shovel combined therewith.

[0002] In climates where snow and ice are present, motorists often have to remove snow and/or ice from the windshield of the automobile before driving. Snow brushes, often combined with an ice scraper, mounted to one end of an elongated handle provide the motorist with the tools for removing the snow and ice from a vehicle. In many instances, however, the tires of the automobile are stuck in snow and a shovel must be used to clear the path for the tires to rotate.

[0003] Shovels are typically mounted at the end of an elongated handle of a length that makes it very difficult to keep in an automobile. Thus, when snow removal around tires is necessary, a person is oftentimes left removing the snow by hand to clear enough away to allow the tires to gain traction to move the vehicle.

[0004] It is therefore a principal object and advantage of the present invention to provide a snow removal tool, such as an ice scraper and/or snow brush, and a shovel adapted for interconnection to the tool.

[0005] It is an additional object and advantage of the present invention to provide a combined snow removal tool and snow shovel that is conveniently stowed in an automobile.

[0006] Other objects and advantages of the present invention will in part be obvious, and in part appear hereinafter.

SUMMARY OF THE INVENTION

[0007] In accordance with the foregoing objects and advantages, the present invention provides a combination snow removal tool and snow shovel. The combination device comprises an elongated handle having an ice scraper attached to one end thereof, a snow brush having sets of bristles extending transversely outwardly from the opposite end of the handle, and a shovel adapted for removable interconnection to one end of the handle, and preferably to the ice scraper. In its preferred embodiment, the ice scraper is of a triangular shape and includes a beveled scraping edge. The snow shovel includes a notch formed through its major surface. The notch is positioned within a recess formed on the underside of the shovel. The notch is sized to receive the scraping edge of the ice scraper and the recess is shaped to accommodate the body of the ice scraper therein. In addition, a pair of locking tabs are adapted on opposing side edges of the recess. The locking tabs are adapted to engage over the body of the ice scraper when the shovel and scraper are interconnected, thereby securing the interconnection.

[0008] To conveniently stow the snow removal tool and shovel when not in use, the upper edges of the opposite sidewalls of the shovel include notches formed therein. The notches are adapted to securely receive the handle of the snow removal tool therein such that the shovel and snow removal tool may be stowed together as a single unit when not in use.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] The present invention will be more fully understood and appreciated by reading the following Detailed Description in conjunction with the accompanying drawings, in which:

[0010] FIG. 1 is a perspective view of the snow removal tool and snow brush assembled;

[0011] FIG. 2 is a perspective view of the snow removal tool portion of the present invention with the handle in a collapsed position;

[0012] FIG. 3 is a perspective view thereof with the handle in an extended position;

[0013] FIG. 4 is an exploded perspective view of the snow removal tool;

[0014] FIGS. 5a-5c are sequential assembly views of the present invention to illustrate the process of interconnecting the snow shovel to the snow removal tool;

[0015] FIG. 6 is an exploded perspective view of the snow removal tool relative to the snow shovel;

[0016] FIG. 7 is a bottom plan view of the snow shovel; and

[0017] FIG. 8 is a top plan view of the snow shovel and snow removal tool in stowed relation.

DETAILED DESCRIPTION

[0018] Referring now to the drawing figures in which like reference numerals refer to like parts throughout, there is seen in FIG. 1 a combination snow removal tool and snow shovel device, designated generally by reference numeral 10, and comprising a snow removal tool 12 and snow shovel 14 removably interconnected to one another. Snow removal tool 12 comprises a telescoping handle 16, a snow brush 18 having bristles extending transversely from one end of the handle and an ice scraper 20 attached to the handle's opposite end. Handle 16 preferably comprises a tubular member 22 and a movable member 24 telescopically engaging tubular member 22, and movable along the handle's longitudinal axis X-X between maximum and minimum positions. Handle 16 may be a unitary handle, however, without affecting the scope of the present invention.

[0019] To secure handle 16 in either its maximum or minimum length positions, a spring biased clip 26 engages either a notch 28 cut out from tubular member 22 or a flange 30 positioned at the end of snow brush 18, respectively. More particularly, as seen in FIGS. 2 and 3, clip 26 includes a downwardly extending flange 32 that snap engages the flange 30 positioned at the end of snow brush 18, and a body portion 32 that snap engages the opening formed through tubular member 22 when tool 10 is positioned with its maximum length. In its preferred form, tubular member 22 is integral with the body of snow brush 18.

[0020] Ice scraper 20 is formed with an essentially triangular body 34 and includes a beveled scraping edge 36. A
tubular extension 38 securely receives movable handle member 24 therein and interconnects the two members.

[0021] Snow shovel 14 generally comprises a major floor portion 38, a pair of opposite upstanding sidewalls 40, 42, and a rear wall 44 that collectively define the snow collecting region of the shovel. Floor portion 28 includes an elongated notch 46 cut out therefrom and that extends transversely thereacross. Notch 46 is sized to securely receive scraping edge 36 therein. A pair of diagonally extending wall members 48, 50 positioned on opposing sides of notch 46 define a triangular recess 52 adapted to receive triangular body 34. A pair of biased locking tabs 54, 56 extend inwardly from walls 48, 50, respectively, and snap over body 34 to securely maintain the interconnection of shovel 14 and tool 12.

[0022] Referring to FIGS. 5a-5c, snow shovel 14 is placed into operable position by first positioning ice scraper 20 adjacent the bottom surface of major portion 38 and inserting scraping edge 36 through notch 46 (FIG. 5a). Body 34 and tubular extension 38 may then be manually moved towards the bottom surface of major portion 38 (FIG. 5b) and snapped into secure position by forcing body 34 past locking tabs 54, 56 (FIG. 5c.).

[0023] Referring to FIG. 8, to stow device 10, scraping edge 36 may be disassociated from notch 46 and handle 16 is positioned with its longitudinal axis X-X extending across the top of shovel 14. Handle 16 may then be snapped downwardly into engaged relation with a pair of U-shaped notches 58, 60, respectively formed into opposing sidewalls 40, 42, thereby forming a compact unit. In order to minimize the size of device 10 when being stowed, it is, of course, practical to minimize the length of handle 16.

[0024] While this invention has been described in detail with reference to a certain preferred embodiment, it should be appreciated that the present invention is not limited to those precise embodiments. Rather, in view of the present disclosure, which describes the best mode for practicing the invention, many modifications and variations would present themselves to those of skill in the art without departing from the scope and spirit of this invention, as defined in the following claims.

1. A snow tool, comprising:
   a snow removal tool having an elongated handle with first and second opposite ends;
   a snow shovel adapted for removable interconnection to one of said first and second opposite ends of said snow removal tool, wherein said elongated handle of said snow removal tool extends outwardly from said snow shovel when interconnected thereto, thereby providing a handle for said snow shovel.

2. The snow tool of claim 1, wherein said snow removal tool includes first and second opposite ends.

3. The snow removal tool of claim 1, further comprising an ice scraper positioned at said first end.

4. The snow removal tool of claim 3, further comprising a snow brush positioned adjacent said second end.

5. The snow removal tool of claim 3, further comprising an elongated notch cut out from said snow shovel that is adapted to receive a portion of said ice scraper therein.

6. The snow removal tool of claim 5, further comprising a pair of locking tabs associated with said snow shovel and adapted to engage a portion of said ice scraper, thereby maintaining an interconnection between said ice scraper and said snow shovel.

7. The snow removal tool of claim 1, wherein said handle comprises first and second members that adjustably, telescopically engage one another.

8. The snow removal tool of claim 1, wherein said snow shovel comprises a major portion, first and second opposing and upstanding sidewalls, and a rear, upstanding wall that collectively define a snow collection area.

9. The snow removal tool of claim 8, wherein said first and second sidewalls each include a U-shaped notch formed therein.

10. The snow removal tool of claim 9, wherein said U-shaped notches formed in said first and second sidewalls are each adapted to receive said elongated handle therein.

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