United States Patent

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[54] **GARDENER'S GLOVE**
6 Claims, 3 Drawing Figs.

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[51] **Int. Cl.** **A01b 1/00,** A41d 19/00
[50] **Field of Search** 172/370, 371, 378; 2/159, 161, 16, 20, 21; 294/25; 30/298

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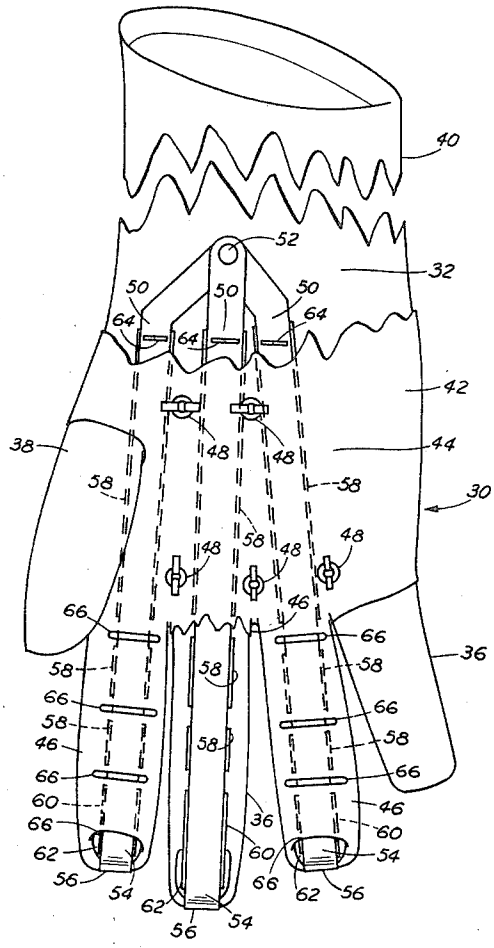
ABSTRACT: A gardener's glove formed of a thin, flexible tough material having finger members and an elongated sleeve. Tool elements are associated with one or more finger members and may be formed integral therewith or otherwise secured thereto. The tool elements extend beyond the tips of the finger members and are curved away therefrom toward the palm to form work engaging portions. Tool means in the form of claws can be provided adjacent the ends of the tool elements remote from the work engaging portions.



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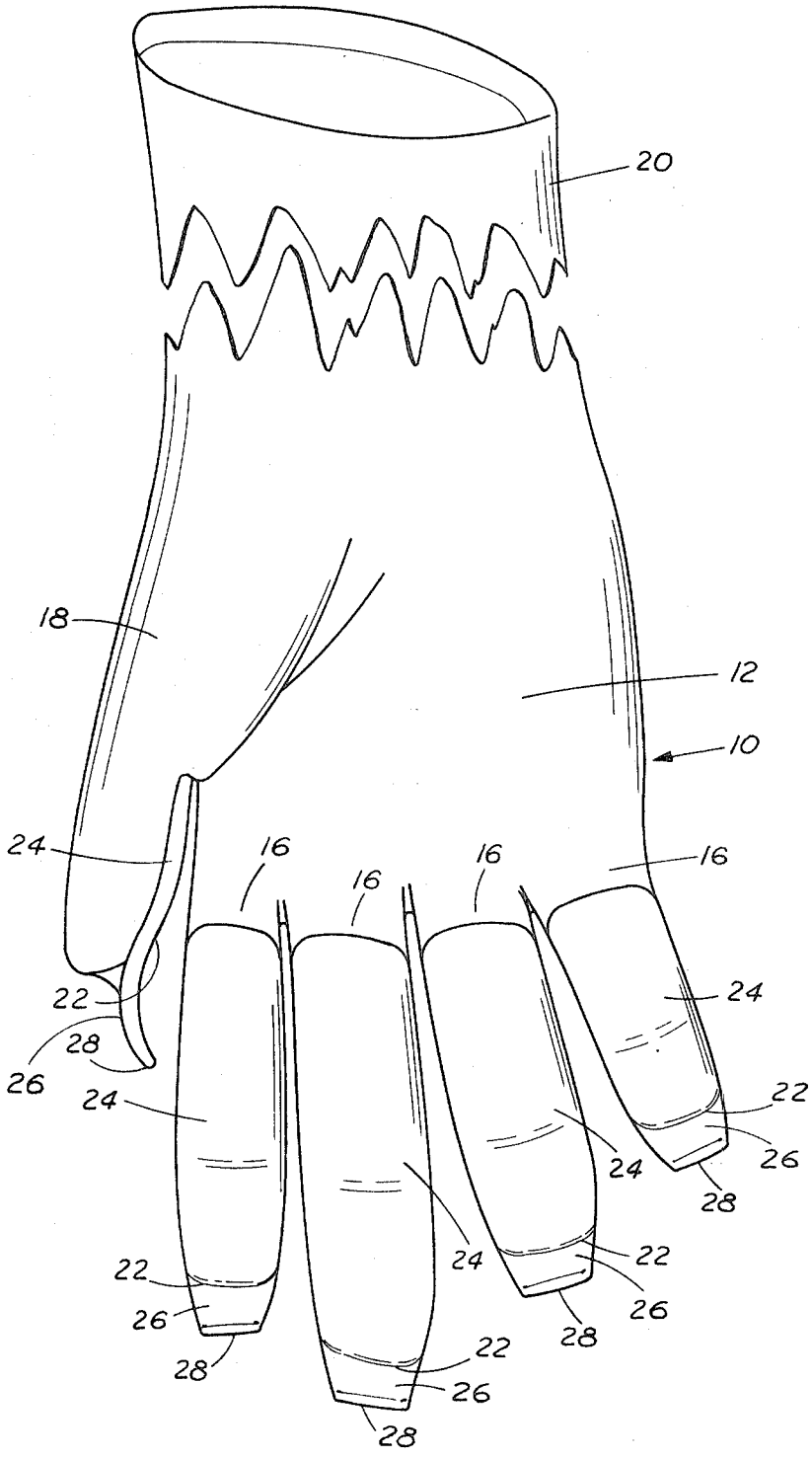

FIG. 1

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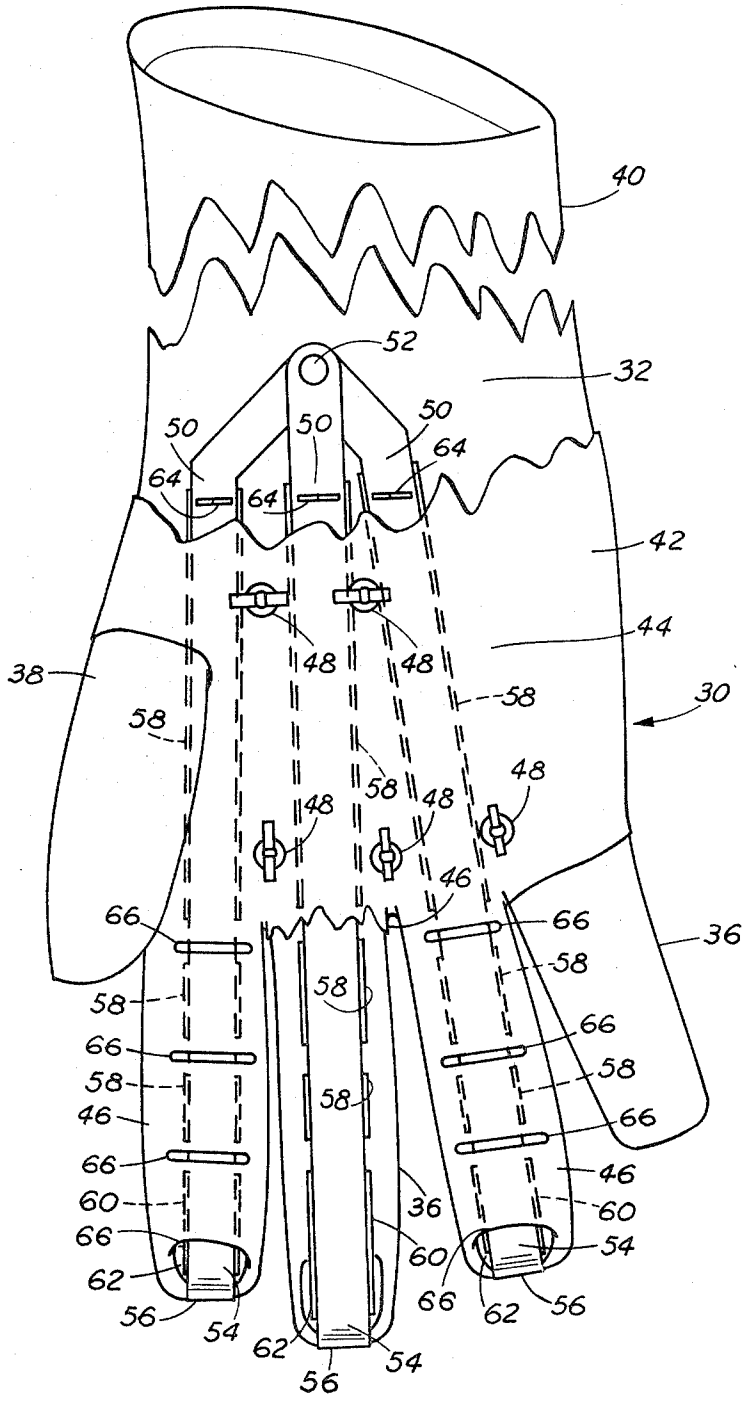

FIG. 2

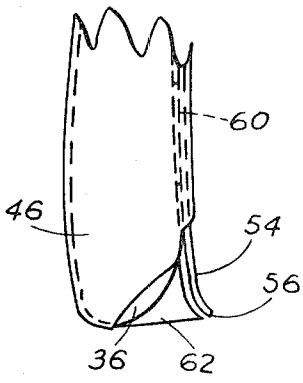

FIG. 3

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GARDENER'S GLOVE

BACKGROUND OF THE INVENTION

This invention relates to gloves and, more particularly, to gloves having tool elements thereon.

In landscaping and gardening operations, tool implements are used for various purposes such as digging, raking, weeding, etc. In areas of crowded vegetation, the tools may be bulky and cumbersome so that the gardener resorts to raking and digging with his fingers. Although gloves may be worn by the gardener for these operations, they are not entirely satisfactory because of their relatively soft exterior surfaces and cannot perform certain rough work.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide an improved glove construction having tool means associated with the finger members.

It is another object of this invention to provide a glove construction for protecting the hand and arm of the wearer and having tool elements integrally formed with the material of the glove.

It is still another object of the present invention to provide a glove construction having flexible tool elements associated with the finger members and movable relative thereto.

The foregoing and other objects, advantages and characterizing features of the present invention will become clearly apparent from the ensuing detailed description of an illustrative embodiment thereof, taken together with the accompanying drawing wherein like reference numerals denote like parts throughout the various views.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of the glove of this invention with tool elements secured to the fingers and thumb thereof;

FIG. **2** is a perspective view of a glove illustrating another form of the invention; and

FIG. **3** is a fragmentary side elevational view of one finger of a glove of this invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. **1** of the drawings, there is shown an illustrative embodiment of a work glove, generally designated **10**, of the present invention comprising a palm portion **12**, a back portion (not shown), finger members **16**, a thumb member **18**, and a sleeve **20** of sufficient length to protect the arms against scratches from thorny and jagged vegetation.

Glove **10** is formed of leather or any other thin, flexible, tough material and is provided with tool elements **22** formed of a durable, rigid, material such as fiberglass resin impregnated by way of example. Tool elements **22** are bonded or otherwise fixedly secured to finger members **16** and thumb member **18**.

Tool elements **22** are generally substantially identical so that a detailed description of one will suffice for all. Each tool element has an elongated shank portion **24** longitudinally curved to follow the contour of the finger member to which portion **24** is secured and is arcuate in cross section to follow the transverse curvature of finger member **16**. Shank portion **24** terminates in a curved portion **26** extending downwardly from palm portion **12** and having a generally flat edge or tip **28**. Of course, curved portion **26** can terminate in a curved or pointed edge, if desired, and the degree of curvature away from the finger member or sharpness of the edge can be varied to suite the particular work to be done.

As a result of the above described glove construction, various gardening operations such as digging, raking, gathering leaves and rubbish, cleaning hedges, cultivating, sorting, planting and weeding can be performed without the use of extraneous bulky and cumbersome tools. The glove is particularly useful in areas of crowded vegetation where the tool elements can be easily applied to the work area while avoiding damage to plants. Also, the glove provides ample protection for the hand and arm of the wearer while permitting unrestricted movement of the hand and fingers. Work may be performed by a single finger or with a plurality of fingers as required. It should be understood that the entire glove can be formed of a plastic material with the fingers and hand enclosure made of a thin, flexible, tough plastic material and the tool elements formed integral therewith but composed of a more durable, rigid plastic material.

FIG. **2** illustrates another form of glove construction of this invention and comprises a glove **30**, formed of leather or any other thin, flexible, tough material and includes a palm portion **32**, a back portion (not shown), finger members **36**, a thumb member **38**, and a sleeve **40** of sufficient length to protect the arm against scratches from prickly vegetation.

A cover **42** is provided with a portion **44** encircling the midsection of glove **30** and has three finger members **46** covering three finger members **36** of glove **30** as shown in FIG. **2**. Portion **44** of cover **42** fits loosely about glove **30** and is suitably secured as by means of fasteners **48** for example, to palm member **32**. Finger members **46** can be adhesively bonded or otherwise fixedly secured at their tips to the outer surfaces of the tips of finger members **36**. A plurality of elongated tool elements **50**, formed of a springy, resiliently yieldable metal are interposed between glove **30** and cover **42**. Tool elements **50** extend toward and along finger members **36** and are pivotally mounted at one end on a common pivot pin **52** extending through the inner face of glove **30** at approximately the wrist portion. The pivotal mounting of tool elements **50** permits lateral swinging movement thereof when finger members **36** are opened and closed. The other ends of tool elements **50** are provided with free end portions **54** terminating in flat edges or tips **56**. As mentioned in connection with the form of invention shown in FIG. **1**, portions **54** can terminate in curved or pointed edges, if desired, and the sharpness of the point can be varied to suit the particular work to be done. Although three finger members **46** are provided on cover **42** and three tool elements **50** are conveniently employed for most purposes, it is to be understood that any necessary or desired number can be used within the purview of this invention.

A plurality of longitudinally spaced guide support tracks **58** are fastened to the outer surface of palm portion **32** and provide bearing support for the relatively slidable tool elements **50**. Rigid support guides **60** are provided with projections **62** adjacent the tips of finger members **36** and are bent outwardly away from finger members **36** to guide tool **50** in arcuate paths (FIG. **3**). Tool elements **50** are generally flat with edges **56** terminating at the tips of finger members **36**. When the wearer flexes his hand, tool elements **50** bend in a curved path and edges **56** extend beyond the tips of finger members **36**. Tool means in the form of claws **64** are provided on the rearward portions of tool elements **50** and project in a direction generally normal thereto away from glove **30**. These claws **64**, in conjunction with portions **54** of tool elements **50**, act as a clam bucket and are effective for gripping various awkward and rough surfaced articles such as logs, lumber, bricks, etc.

A plurality of longitudinally spaced, transversely extending slots **66** are provided in finger members **46** to permit flexing of such members so that the user's fingers can be easily bent inwardly about their joints, thereby promoting comfort and reducing fatigue. The end portions **54** of tool elements **50** protrude through the most remote slots **66** located at the tips of finger members **46**. The above described form of the invention, illustrated in FIGS. **2** and **3**, can perform all of the functions set forth in connection with the form shown in FIG. **1** and has the added advantage of grasping articles with a clam bucket grip. If desired, however, claws **64** may be deleted and glove **30** may be used in a manner similar to glove **10**.

From the foregoing, it is apparent that the objects of the present invention have been fully accomplished. Illustrative embodiments of the principles of this invention having been

described and illustrated, it is to be understood that this has been done by way of illustration only.

I claim:

1. A glove comprising: a body having a back portion, a palm portion, finger members and a sleeve portion, a plurality of tool elements formed of narrow strips of resilient material extending along said finger members, respectively, said tool elements being pivotally connected at their one ends about a common pivot axis on said palm portion, said pivot axis extending generally normal to said palm portion; said tool elements having portions extending through said finger members and terminating in work engaging tips at the other ends thereof axially slidable through openings in said finger members.

2. A glove according to claim 1 together with tools mounted on said tool elements adjacent said one ends thereof.

3. A glove according to claim 1 together with track means secured to said body for guiding said tool elements.

4. A glove according to claim 3 wherein said track means include curved projections bent outwardly away from said finger members and located adjacent said openings for guiding said tool elements in arcuate paths.

5. A glove according to claim 1 wherein said finger members are formed of two layers of material with said tool element portions extending therebetween.

6. A glove according to claim 1 together with means for facilitating the flexing of said finger members.