

CLAIMS

What is claimed is:

1. A cleaning apparatus comprising:
 - a baseplate that has a baseplate hole that extends therethrough;
 - a collar attached to the baseplate, the collar extending from the baseplate and through the baseplate hole, the collar having a collar hole that extends through the collar from a first surface of the collar to a second surface of the collar;
 - a cap that has a cap hole that extends therethrough, the cap disposed on the collar;
 - a shaft that extends from the first surface of the collar through the cap hole, the collar hole and the baseplate hole;
 - a rotatable handle attached to a first portion of the shaft that extends from the cap hole, motion of the rotatable handle impeded by the cap in a direction of extension of the collar hole;
 - a disk attached to a second portion of the shaft and separated from a second surface of the baseplate; and
 - at least one abrasive pad attached to the disk to remove buildup on a surface of a pedestal.
2. The cleaning apparatus of claim 1, wherein:
 - the collar hole comprises a first collar hole portion proximate to the cap and that has a first collar diameter and a second collar hole portion distal from the cap and that has a second collar diameter, the first collar diameter larger than the second collar diameter, and
 - the shaft comprises:
 - a first shaft portion that extends from a first surface of the shaft through the cap hole into the first collar hole portion, the first shaft portion that has a first shaft diameter, and
 - a second shaft portion that extends from the first collar hole portion through the baseplate hole, the second shaft portion that has a second shaft diameter larger than the first shaft diameter,

the second portion of the shaft that has a third shaft diameter larger than the second shaft diameter.

3. The cleaning apparatus of claim 2, further comprising a weighted ring attached to the disk, the weighted ring surrounding the second portion of the shaft.
4. The cleaning apparatus of claim 2, wherein:
 - the rotatable handle comprises a manipulating handle and a coupling mechanism,
 - the coupling mechanism has a square hole through which the first shaft portion passes, and
 - the first shaft portion has a square cross-section, and
 - at least one of:
 - the second shaft portion has a circular cross-section, or
 - the first shaft portion has a first shaft portion hole therein, and a retaining mechanism is disposed in the first shaft portion hole to retain the manipulating handle.
5. The cleaning apparatus of claim 1, wherein:
 - the at least one abrasive pad comprises a plurality of individual abrasive pads that has a pad diameter smaller than a disk diameter of the disk, disposed to entirely cover an area of the disk over a single revolution,
 - exhaust ports are disposed on a first surface of the baseplate and connected to exhaust holes that extends through the baseplate,
 - the disk comprises a plurality of evenly spaced disk holes that each extends therethrough, and
 - the number of disk holes is larger than the number of exhaust ports.
6. The cleaning apparatus of claim 5, wherein:
 - the individual abrasive pads are disposed between the disk holes and arranged such that an arc formed by an outer edge of one of the individual abrasive pads is tangential to an arc formed by an inner edge of another of the individual abrasive pads, or

the individual abrasive pads are disposed between the disk holes and arranged such that a first set of the individual abrasive pads are disposed linearly in a first direction and a second set of the individual abrasive pads are disposed linearly in a second direction perpendicular to the first direction, the first set of the individual abrasive pads in contact and the second set of the individual abrasive pads separated.

7. The cleaning apparatus of claim 1, wherein:
 - the baseplate is substantially circular and has a plurality of extensions that each extends outward from a circumference of the circle, and
 - feet extend from the extensions in a direction of the disk, the feet configured to couple with engaging members of the pedestal.
8. The cleaning apparatus of claim 1, wherein:
 - the baseplate and disk are substantially circular,
 - a diameter of the baseplate is larger than a diameter of the disk,
 - the baseplate has a groove formed in the second surface of the baseplate,
 - the groove has a larger diameter than the diameter of the disk,
 - a skirt is retained in the groove and extends from the baseplate beyond the disk, and
 - a gasket is disposed on an end of the skirt to seal a pedestal on which the cleaning apparatus is disposed.
9. A cleaning apparatus comprising:
 - a baseplate that has a baseplate hole that extends therethrough;
 - a cap attached to the baseplate and that has a cap hole that extends therethrough;
 - a bushing disposed between the cap and the baseplate, the bushing disposed in the baseplate hole and that has a bushing hole that extends therethrough;
 - a spindle that has a first portion that extends through the bushing hole into the cap hole;

a crank plate that has a central portion attached to a second portion of the spindle and that extends in a direction parallel with the baseplate to a distal portion;

a disk collar attached to the distal portion of the crank plate;

a disk attached to the disk collar, the disk having a diameter that is at least about one half a diameter of the baseplate; and

an abrasive pad attached to the disk.

10. The cleaning apparatus of claim 9, wherein:

the baseplate and disk are substantially circular, a diameter of the baseplate larger than a diameter of the disk,

the baseplate has a groove formed in a second surface of the baseplate, the groove that has a larger diameter than the diameter of the disk,

a skirt is retained in the groove and extends from the baseplate beyond the disk, and

a gasket disposed on an end of the skirt to seal a pedestal on which the cleaning apparatus is disposed.

11. The cleaning apparatus of claim 9, wherein:

the baseplate is substantially circular and has a plurality of extensions that extends inward from a circumference of the circle, and

feet extend from the extensions in a direction of the disk, the feet configured to couple with engaging members of a pedestal on which the cleaning apparatus is disposed.

12. The cleaning apparatus of claim 9, wherein at least one of:

exhaust holes extend through the baseplate,

the disk collar comprises a swivel joint that keeps the disk level with a pedestal on which the cleaning apparatus is disposed, or

the cleaning apparatus further comprises at least one of:

a manual crank that has a handle and is attached to a first portion of the spindle, or

a motor spindle attached to a first portion of the spindle, and a motor configured to drive the motor spindle.

13. A cleaning apparatus comprising:
- a baseplate that has a baseplate hole that extends therethrough;
 - a bushing attached to the baseplate and that extends from the baseplate and through the baseplate hole, the bushing having a bushing hole that extends through the bushing from a first surface of the bushing to a second surface of the bushing;
 - a spindle that extends from the second surface of the bushing through the baseplate and bushing holes, the spindle projecting from the first surface of the bushing;
 - a rotatable handle attached to a first portion of the spindle that extends from the bushing;
 - a disk attached to a second portion of the spindle, the disk separated from a second surface of the baseplate;
 - a bearing ring disposed between the baseplate and disk to ease rotation of the disk; and
 - abrasive pads attached to the disk.
14. The cleaning apparatus of claim 13, wherein the spindle comprises:
- a first spindle portion that has a first spindle diameter,
 - a second spindle portion that extends from the bushing hole through the baseplate hole and from the first surface of the bushing,
 - the second spindle portion that has a second spindle diameter larger than the first spindle diameter, and
 - a third spindle portion attached to the disk and that has a third spindle diameter larger than the second spindle diameter.
15. The cleaning apparatus of claim 14, wherein:
- the rotatable handle comprises a manipulating handle and a coupling mechanism,
 - the coupling mechanism has a square hole through which the first spindle portion passes, and
 - the first spindle portion has a square cross-section.

16. The cleaning apparatus of claim 13, wherein:
the abrasive pads have a pad diameter smaller than a disk diameter of the disk, disposed to entirely cover an area of the disk over a single revolution.
17. The cleaning apparatus of claim 16, wherein:
an exhaust port is disposed on a first surface of the baseplate,
the exhaust port is connected to an exhaust hole that extends through the baseplate,
the disk comprises a plurality of evenly spaced disk holes that each extends therethrough, and
the abrasive pads are disposed between the disk holes and arranged such that an arc formed by an outer edge of one of the abrasive pads is tangential to an arc formed by an inner edge of another of the abrasive pads.
18. The cleaning apparatus of claim 17, wherein:
the abrasive pads are disposed between the disk holes,
the abrasive pads arranged such that a first set of the abrasive pads are disposed linearly in a first direction and a second set of the abrasive pads are disposed linearly in a second direction perpendicular to the first direction, and
the first set of the abrasive pads are in contact and the second set of the abrasive pads are separated.
19. The cleaning apparatus of claim 13, wherein:
the baseplate is substantially circular and has a plurality of extensions that each extends outward from a circumference of the circle,
feet extend from the extensions in a direction of the disk, and
the feet are configured to couple with engaging members of a pedestal on which the cleaning apparatus is disposed.
20. The cleaning apparatus of claim 13, wherein:
the baseplate and disk are substantially circular,
a diameter of the baseplate is larger than a diameter of the disk,
the baseplate has a groove formed in the second surface of the baseplate,
the groove has a larger diameter than the diameter of the disk,

a skirt is retained in the groove and extends from the baseplate beyond the disk, and

a gasket is disposed on an end of the skirt to seal a pedestal on which the cleaning apparatus is disposed.