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(54) **WHEEL CHOCK CART**

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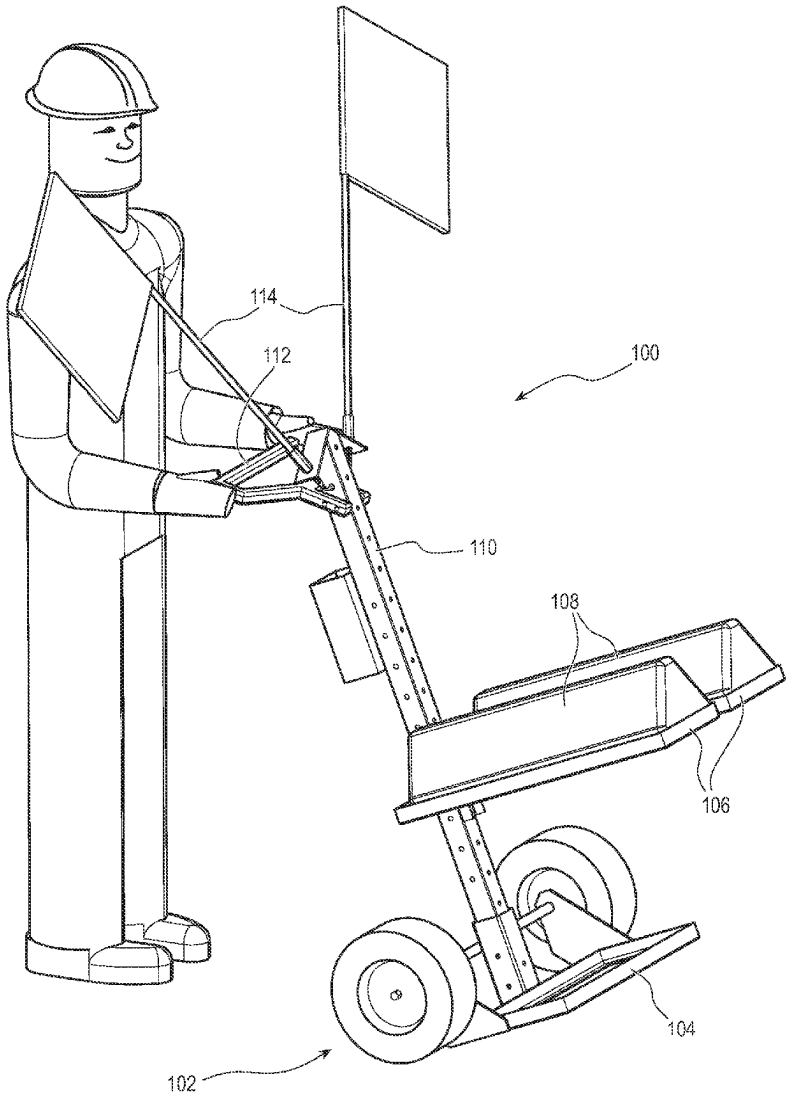
(57) **ABSTRACT**

An apparatus can include a wheeled chock cart for moving wheel chocks in an outdoor environment. The wheeled chock cart can include: a bottom shelf sized and shaped to receive a power supply; a mounting sleeve attached to the bottom shelf; a post removably disposed within and fastened to the mounting sleeve, the post defining a plurality of apertures; a whip mount attached to the post; a whip attachable to the whip mount; a handle attached to a top portion of the post; and a pair of wheel chock baskets removably mounted to the post at an aperture of the plurality of apertures.



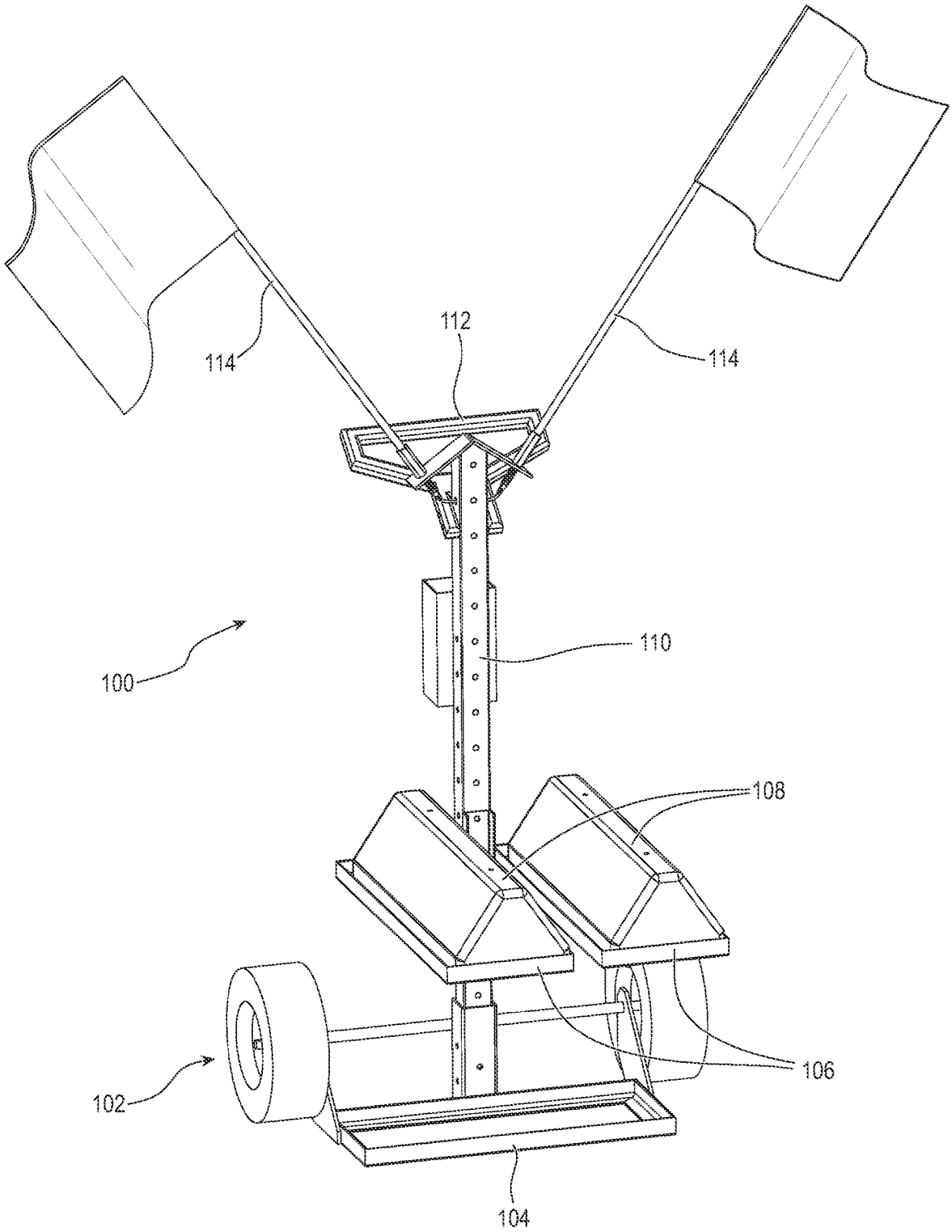


FIG. 1A

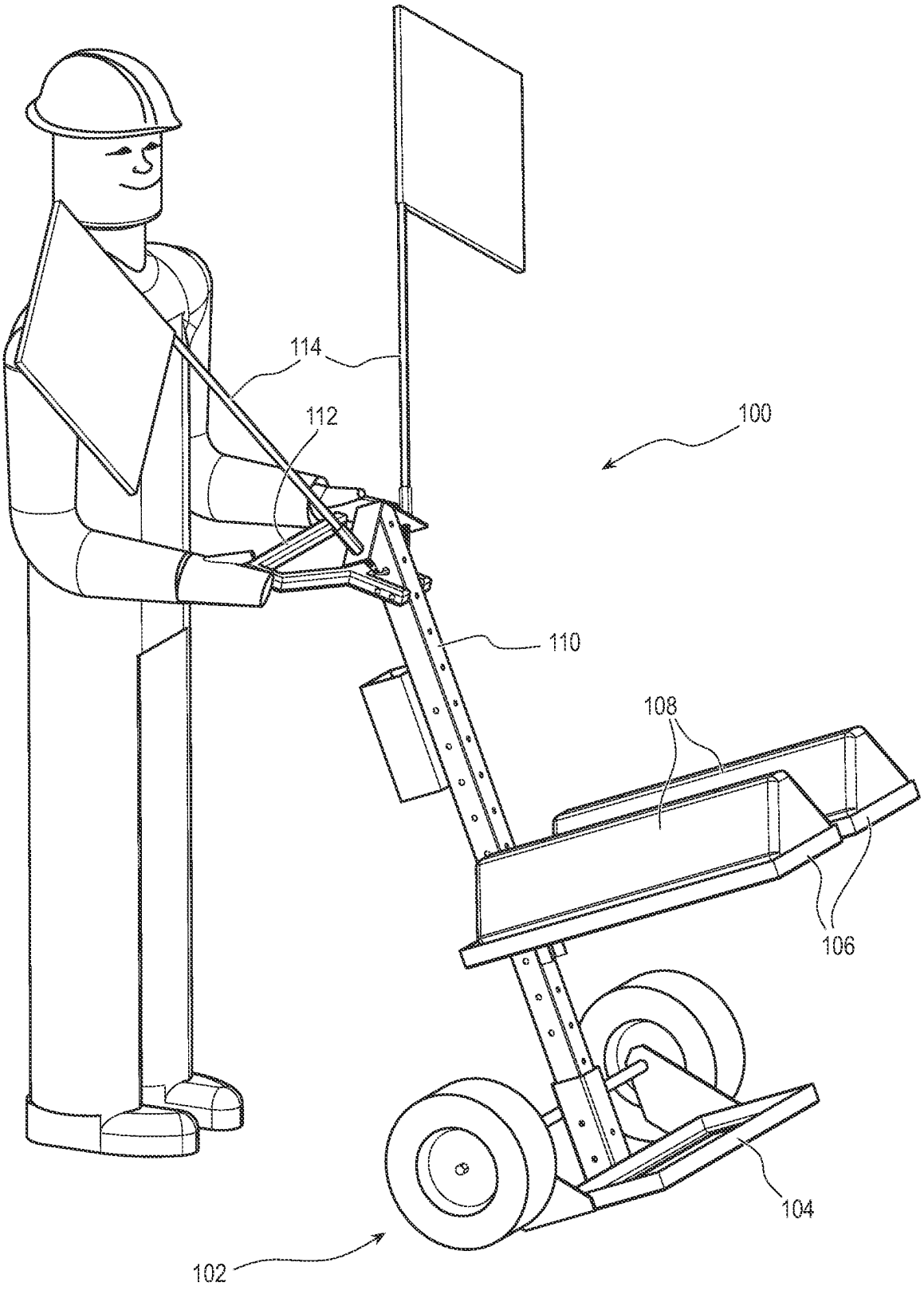


FIG. 1B

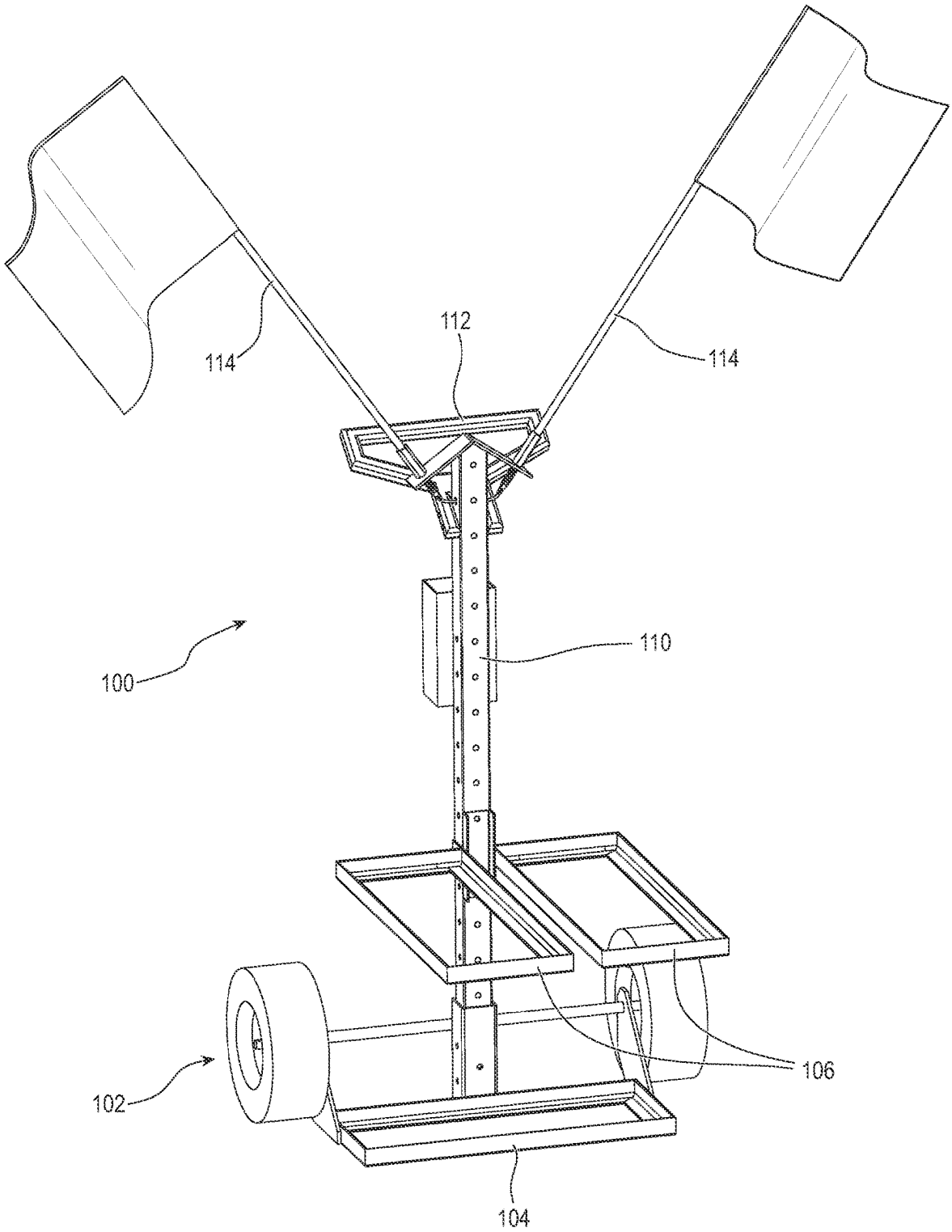
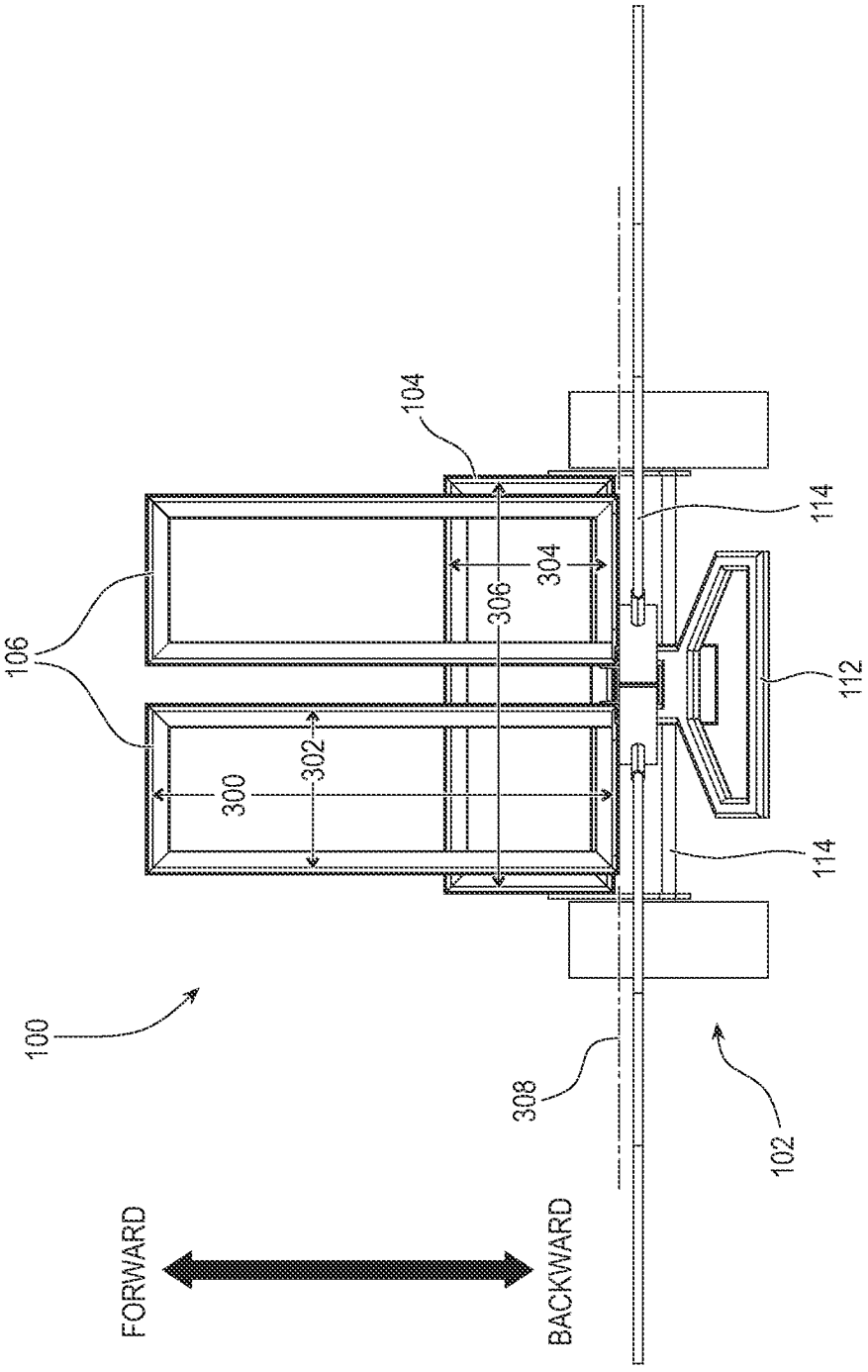


FIG. 2


104
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FORWARD
BACKWARD

FIG. 3

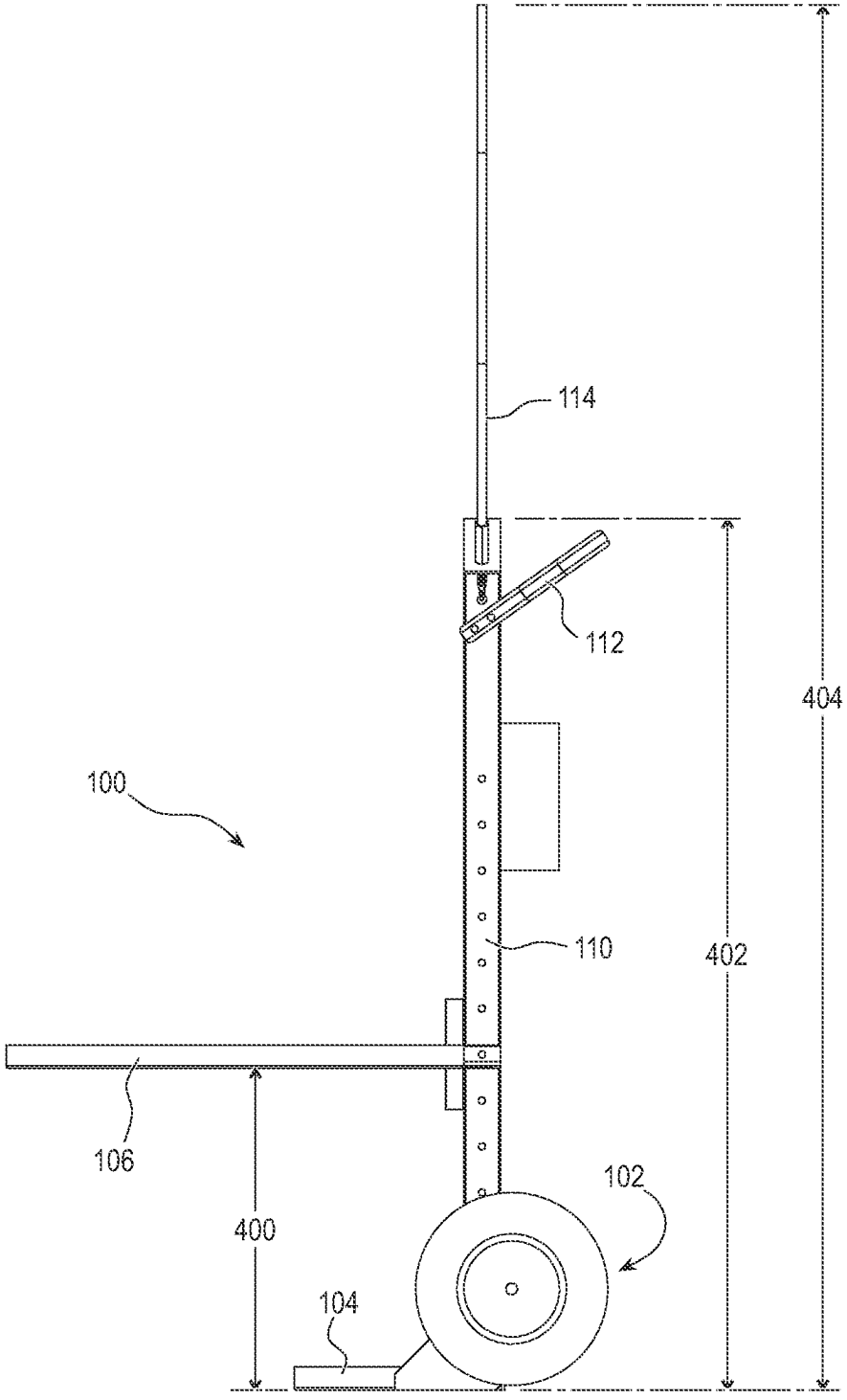

FIG. 4

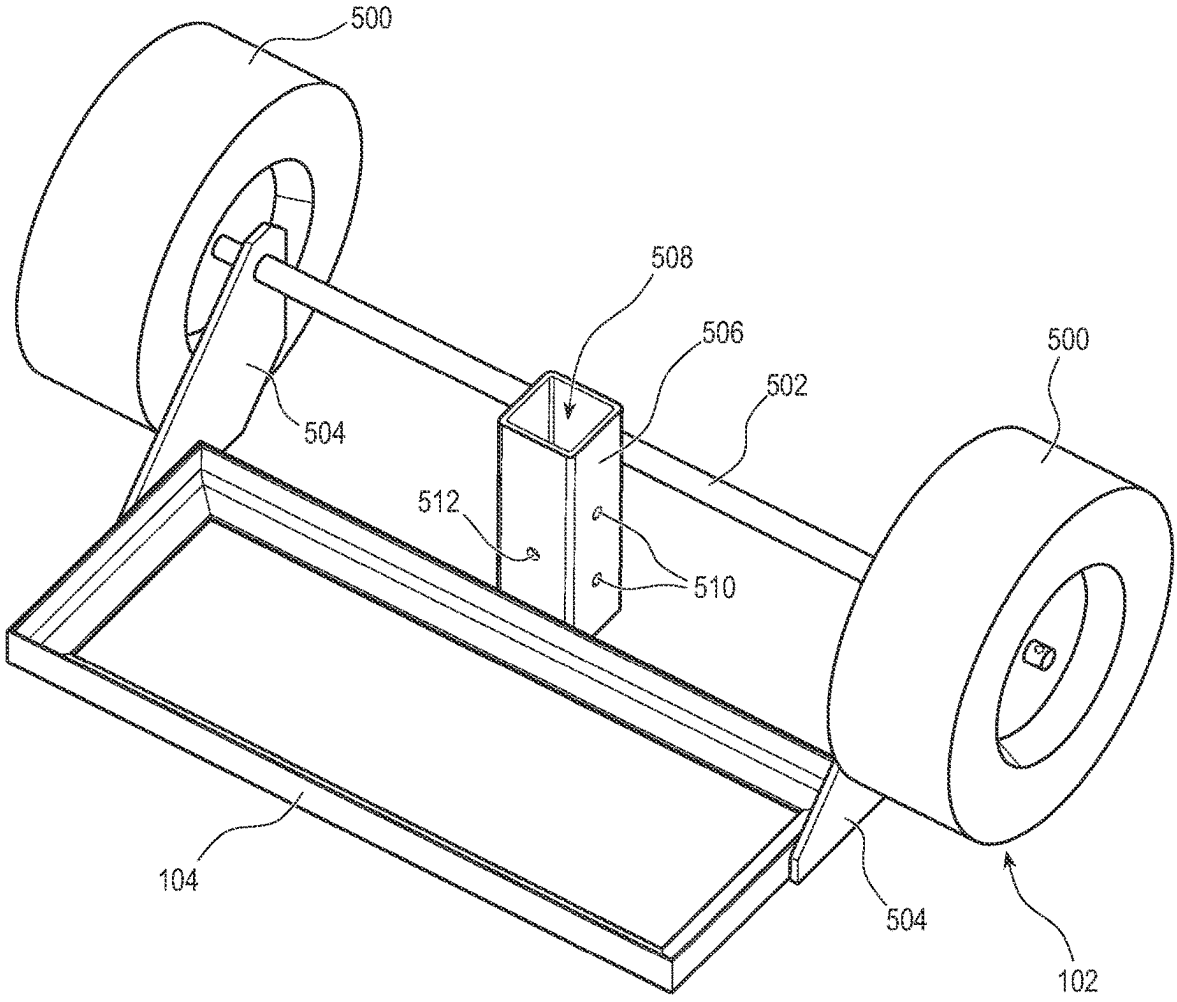

FIG. 5

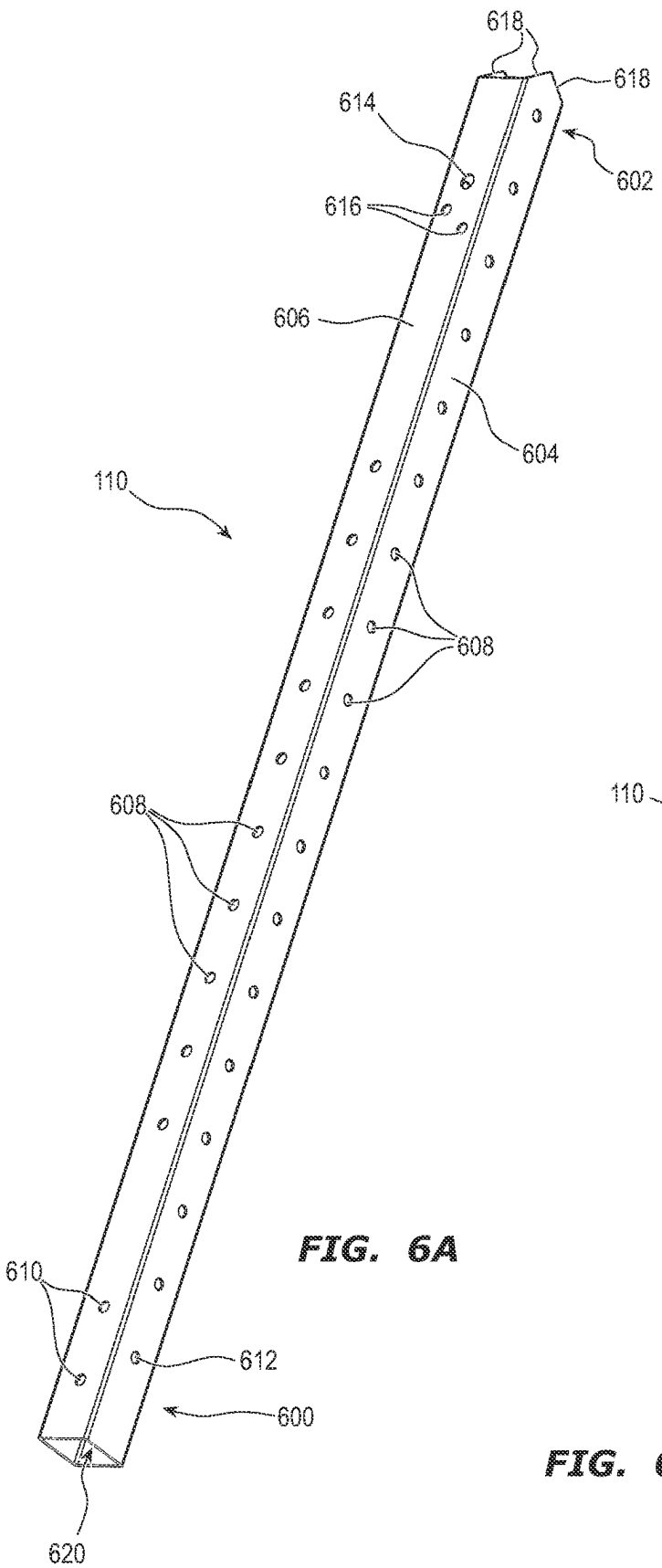
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FIG. 6A

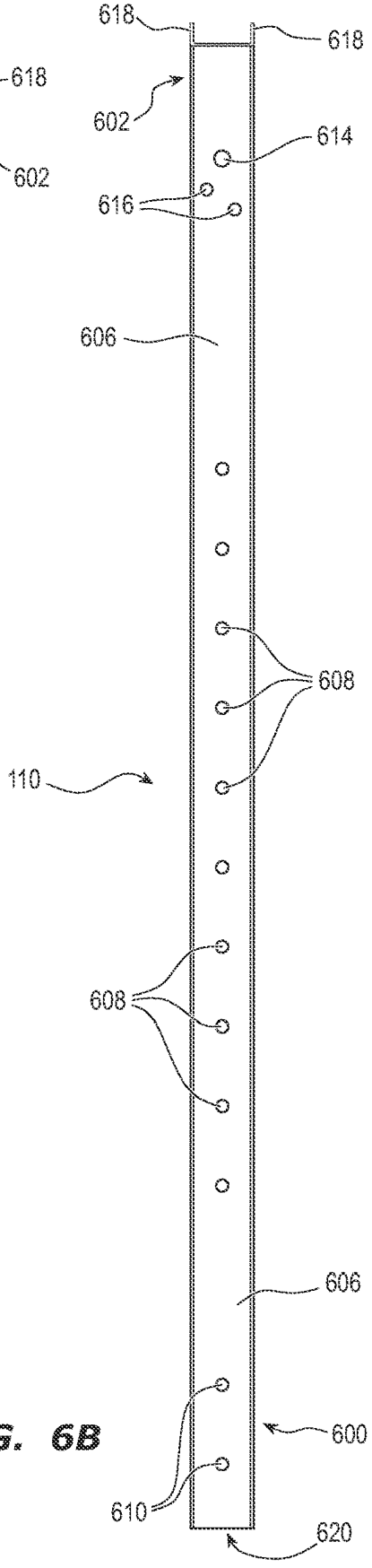
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FIG. 6B

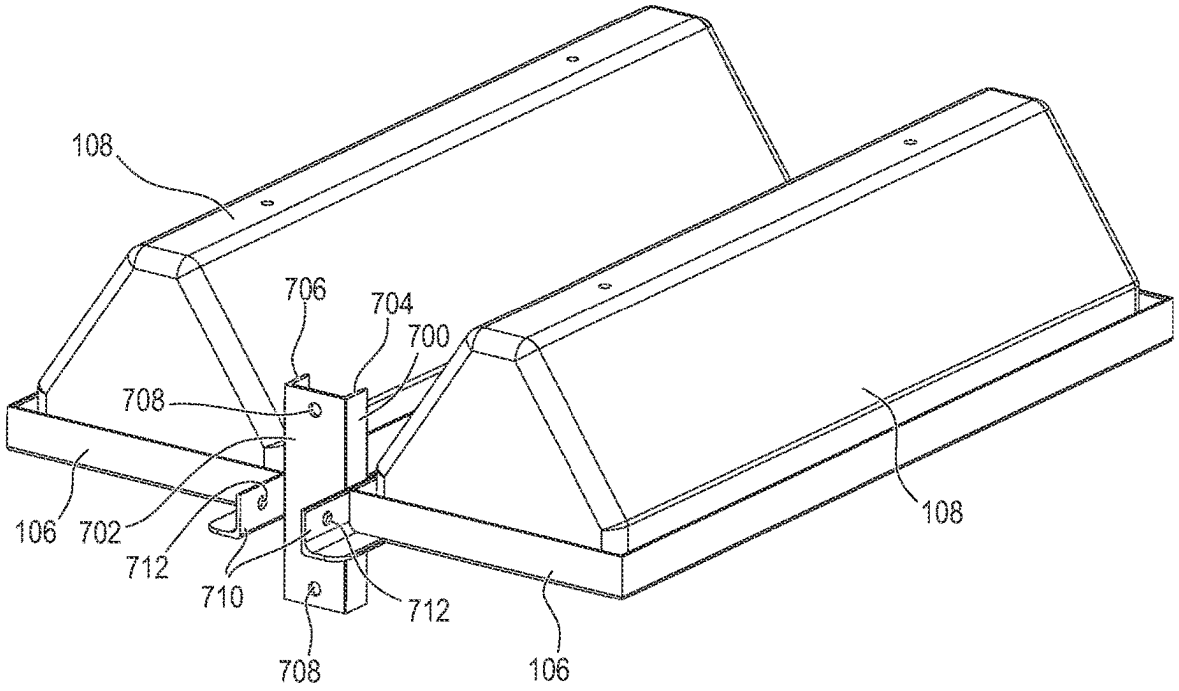
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FIG. 7A

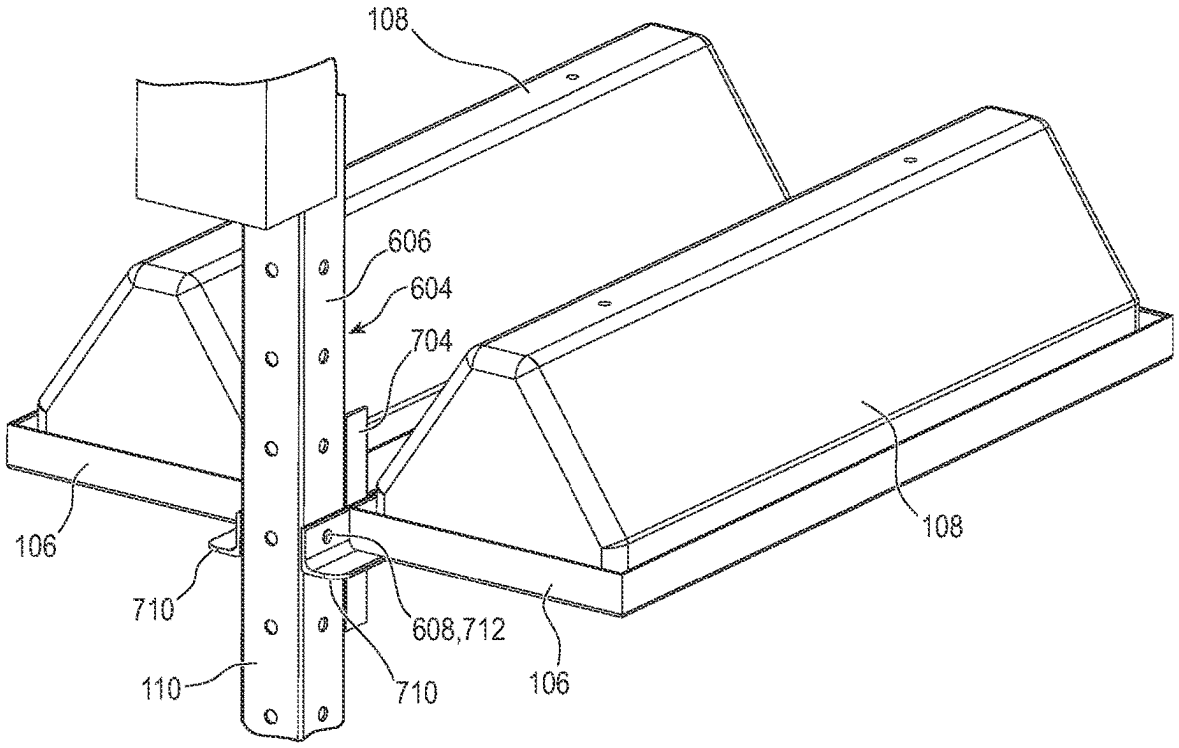
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FIG. 7B

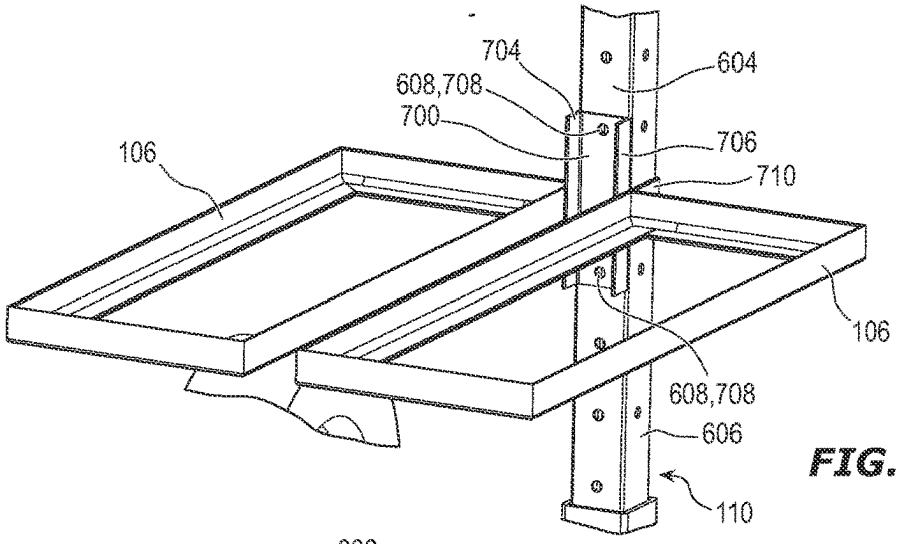
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FIG. 7C

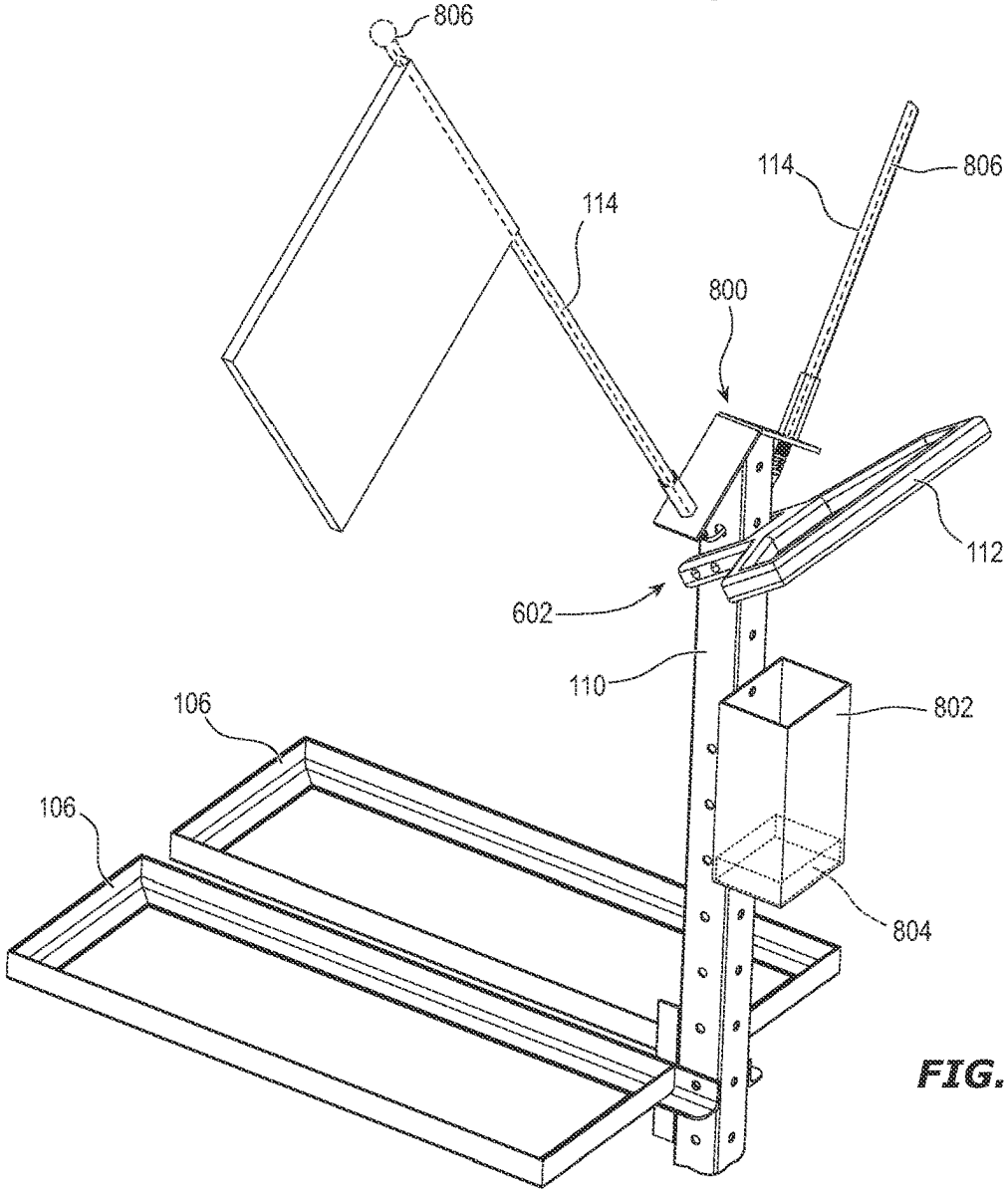
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FIG. 8

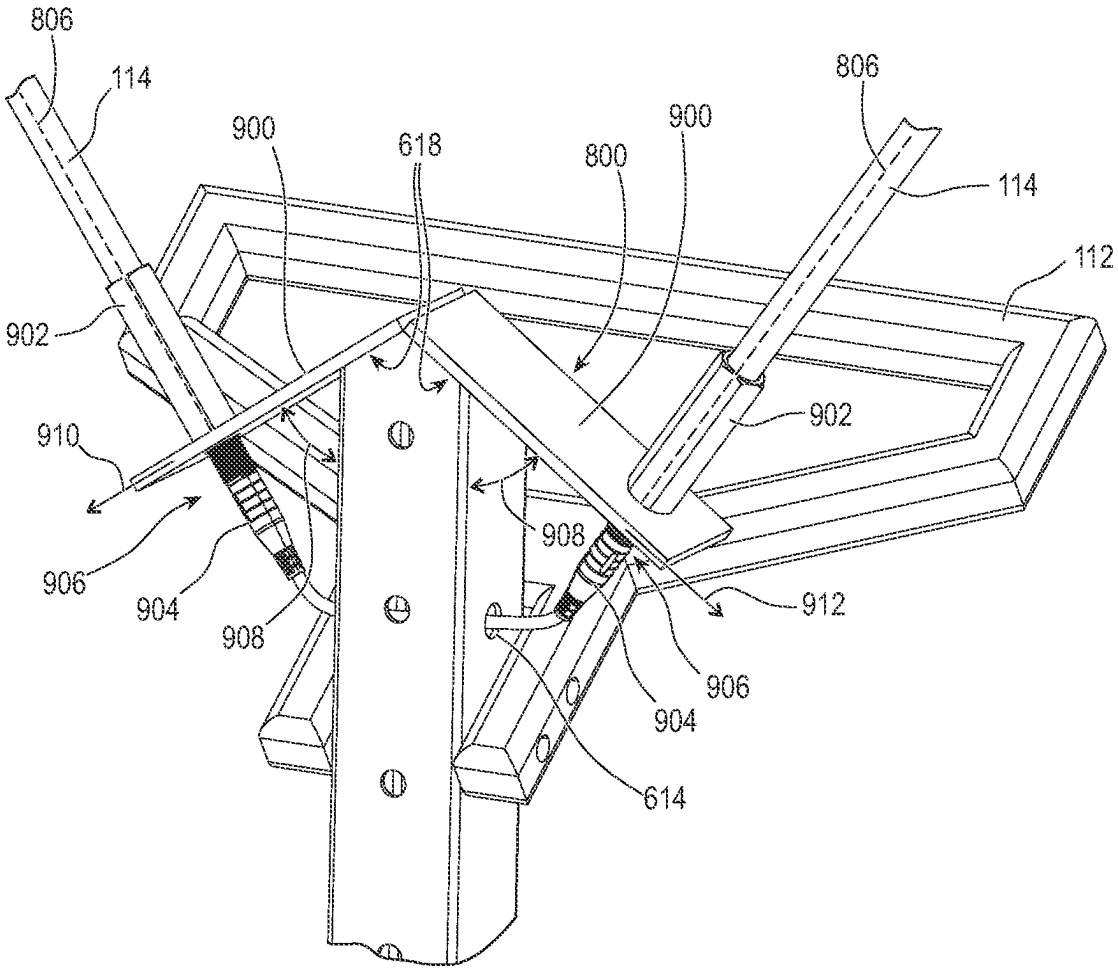
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FIG. 9

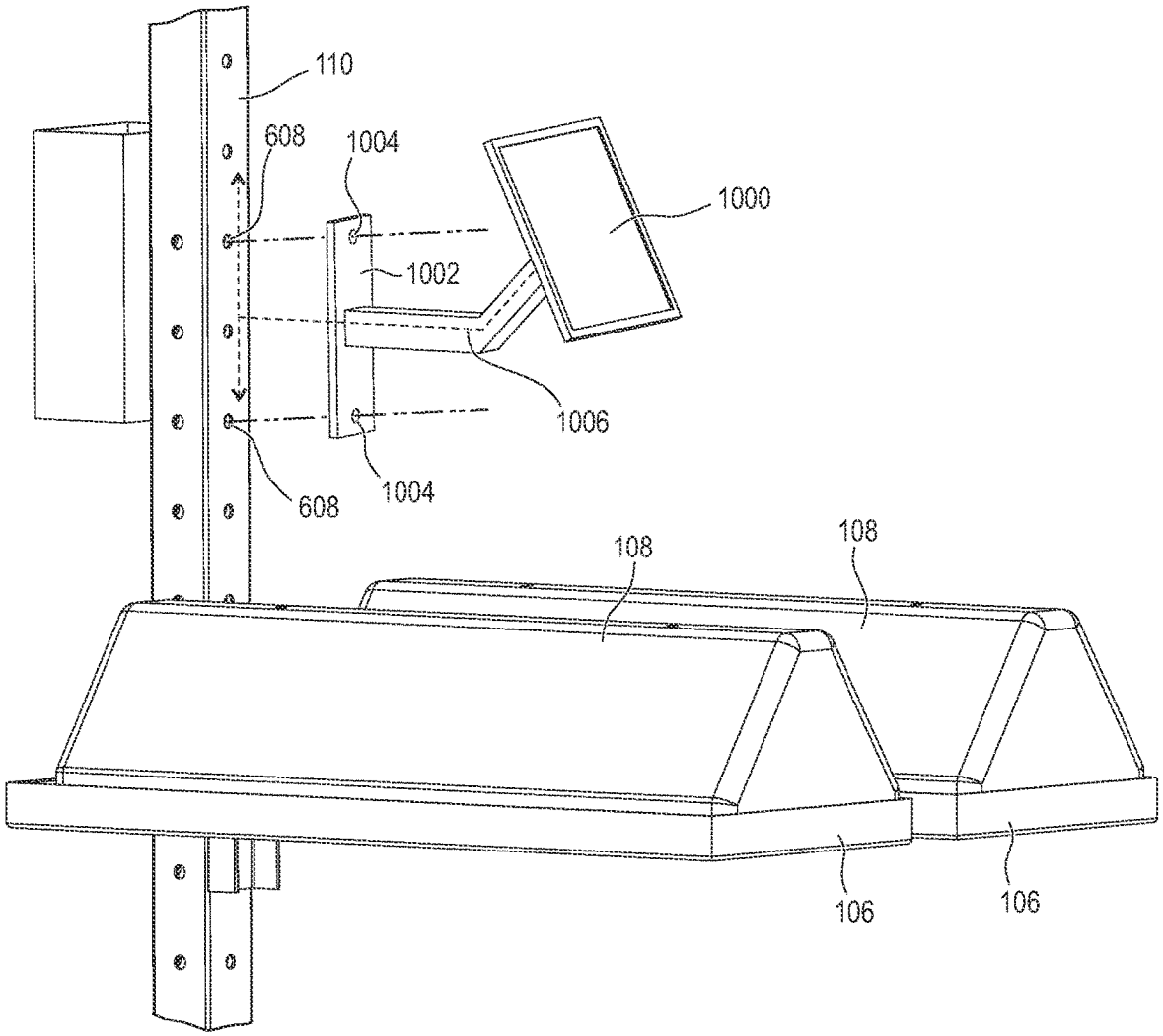

FIG. 10

WHEEL CHOCK CART

FIELD

[0001] The described examples relate generally to wheel chock carts.

BACKGROUND

[0002] Wheel chocks can include wedges of material to place closely against the wheels of a vehicle to prevent unintended movement or rotation of the wheels. In some examples, wheel chocks are used in combination with brakes (e.g., parking brakes) to prevent accidental movement of the vehicle when the vehicle is intended to remain stationary. Wheel chocks can be used in many different industries. In some examples, wheel chocks are used in the aviation industry to help maintain an aircraft in position (e.g., when parked in a hangar, during maintenance procedures, or when loading or boarding an aircraft).

[0003] Moving wheel chocks has a variety of drawbacks. For example, moving wheel chocks can be a laborious task that typically involves a user bending over to grab the wheel chock, carrying the wheel chock to a desired location, and again bending over to set the wheel chock on a ground surface. This process is repeated over and over throughout a work day for some wheel chock users, such as ground personnel at airport tarmacs and terminals who marshal aircraft. In some cases, to avoid laborious aspects, wheel chock users may choose to move wheel chocks in undesirable ways (e.g., kicking, tossing, sliding, etc.) that may accelerate the life cycle of a wheel chock and/or lend to inefficient field operations. When wheel chocks are not in use, a wheel chock can be improperly positioned in a way that results in the wheel chock being lost or in a way that encumbers vehicle traffic. Accordingly, there is a constant need for convenient, ergonomic wheel chock storage and transport, particularly for outdoor environments and around aircraft.

[0004] In addition, delineators, warning cones, barrels, cable stands, and channelizers are commonly used to direct and warn vehicle operators and pedestrians. At airports, these devices are often used to delineate paths across the tarmac and at terminals to keep aircraft in "safe zones" that keep aircraft from colliding with structures, vehicles, and personnel on the ground surface. These devices can also be laborious to move. Furthermore, these warning devices are often too short in height for pilots or drivers to see and accurately judge their vehicle's proximity to them. Contact between the vehicle and the warning devices may damage the vehicle and/or destroy the warning device. As a result, there is a need for an improved delineator that is conveniently transportable, easily seen in terms of height and visibility, and configured for safe contact or abutment with a vehicle.

[0005] The subject matter claimed herein is not limited to examples that solve any disadvantages or that operate only in environments such as those described above. Rather, this background is only provided to illustrate one example technology area where some examples described herein may be practiced.

SUMMARY

[0006] An aspect of the present disclosure relates to a wheeled cart. The wheeled cart can include a wheel base that includes a pair of wheels, axle braces positioned adjacent to each wheel of the pair of wheels, and an axle coupling the pair of wheels and extending through the axle braces. The wheeled cart can additionally include a bottom shelf integrally attached to the wheel base via the axle braces, the bottom shelf sized and shaped to receive a power supply. The wheel cart can further include: a mounting sleeve integrally attached to the bottom shelf; a central support column removably disposed within and fastened to the mounting sleeve, the central support column having a plurality of attachment positions; a whip mount positioned at a top portion of the central support column; a handle attached to the central support column adjacent to the whip mount; and a pair of wheel chock baskets positioned forward of the central support column and above the bottom shelf, the pair of wheel chock baskets being removably mounted to the central support column at a first attachment position of the plurality of attachment positions. In some examples, the wheeled cart is self-standing in an upright position when at rest, and the wheeled cart is configured to be pushed or pulled when at an angled position relative to the upright position.

[0007] The wheeled cart can further include a wand basket removably mounted to the central support column at a second attachment position of the plurality of attachment positions. In some examples, the wheeled cart can include a charging dock positioned adjacent to or integrally formed within the wand basket. In at least one example, the wheeled cart can include a power cable routed through the central support column to provide power to one or more components, the power cable connectable to the power supply. In one example, the power cable extends to and is electrically connectable with the whip mount.

[0008] In particular implementations, the wheeled cart can include a solar array removably attached to the central support column at a second attachment position of the plurality of attachment positions, the solar array electrically connectable with at least one of the power supply or the whip mount. In certain examples, the wheeled cart includes a mounting bracket positionable longitudinally along the central support column, the mounting bracket being removably mounted to the central support column at a second attachment position of the plurality of attachment positions, wherein the mounting bracket is positioned between and integrally attached to the pair of wheel chock baskets. In one example, the mounting bracket is positioned perpendicular to the pair of wheel chock baskets. The wheeled cart can further include a whip attached to the whip mount. The whip can include at least one of a flag, light, or reflective surface.

[0009] Another aspect of the present disclosure relates to a cart for moving aviation wheel chocks in an outdoor environment. The cart can include: a bottom shelf sized and shaped to receive a power supply; a mounting sleeve attached to the bottom shelf; a post removably disposed within and fastened to the mounting sleeve, the post defining a plurality of apertures; a whip mount attached to the post; a whip attachable to the whip mount; a handle attached to a top portion of the post; and a pair of wheel chock baskets removably mounted to the post at an aperture of the plurality of apertures.

[0010] In some examples, the cart is configured to be visible in the outdoor environment during nighttime or inclement weather. In at least one example, the cart is configured to self-stand and remain in place when exposed

to jet wash or windy conditions. In one or more examples, when the whip is attached to the whip mount, the whip is sized and oriented at a height to align aircraft wing tips at predetermined positions in the outdoor environment. In one example, the pair of wheel chock baskets is height adjustable from the aperture of the plurality of apertures to a different aperture of the plurality of apertures. In certain implementations, the whip includes a light assembly powered by the power supply. In some examples, the whip mount comprises a power connection to the power supply; and the whip mount is angularly oriented relative to the post such that, upon exposure to water, the water is shed away from the power connection.

[0011] Yet another aspect of the present disclosure relates to a wheel chock cart that can include: a bottom shelf sized and shaped to receive a power supply; a mounting sleeve attached to the bottom shelf; a post removably disposed within and fastened to the mounting sleeve, the post defining a plurality of apertures; a whip mount attached to the post; a whip attachable to the whip mount and comprising a light assembly; a power cable extending through the post and connectable with the light assembly; a handle attached to a top portion of the post; a pair of wheel chock baskets removably mounted to the post at a first aperture of the plurality of apertures; and a wand basket removably mounted to the post at a second aperture of the plurality of apertures. In some examples, the pair of wheel chock baskets is interchangeable with a different pair of wheel chock baskets. In at least one example, each wheel chock basket of the pair of wheel chock baskets is sized and shaped to receive a first wheel chock; and each wheel chock basket of the different pair of wheel chock baskets is sized and shaped to receive a second wheel chock different from the first wheel chock.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The disclosure will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

[0013] FIGS. **1**A-**1**B illustrate a wheel chock cart in accordance with one or more examples of the present disclosure;

[0014] FIGS. **2**-**4** respectively illustrate perspective, top, and side views of a wheel chock cart in accordance with one or more examples of the present disclosure;

[0015] FIG. **5** illustrates an assembled portion of a wheel chock cart in accordance with one or more examples of the present disclosure;

[0016] FIGS. **6**A-**6**B respectively illustrate perspective and side views of a central support column in accordance with one or more examples of the present disclosure;

[0017] FIGS. **7**A-**7**C illustrate a connection between a pair of wheel chock baskets and a central support column in accordance with one or more examples of the present disclosure;

[0018] FIG. **8** illustrates various components attached to a wheel chock cart in accordance with one or more examples of the present disclosure;

[0019] FIG. **9** illustrates a detailed view of a whip mount on a wheel chock cart in accordance with one or more examples of the present disclosure; and

[0020] FIG. **10** illustrates a solar array attachable to a wheel chock cart in accordance with one or more examples of the present disclosure.

DETAILED DESCRIPTION

[0021] Reference will now be made in detail to representative examples illustrated in the accompanying drawings. It should be understood that the following descriptions are not intended to limit the examples to one preferred example. To the contrary, it is intended to cover alternatives, modifications, and equivalents as can be included within the spirit and scope of the described examples as defined by the appended claims.

[0022] The following disclosure relates to a wheel chock cart that can store and move wheel chocks. In particular implementations, the wheel chock cart of the present disclosure also includes one or more whips extending from the wheel chock cart (e.g., to signal operators or pilots of their vehicle's position).

[0023] In some examples the wheel chock cart can include one or more wheel chock baskets (e.g., a pair of wheel chock baskets) that can be adjustably mounted to the wheel chock cart. For example, a wheel chock basket can be mounted at various heights and/or in a variety of configurations relative to the wheel chock cart. The wheel chock basket in some examples is removably attached to a front portion of the wheel chock cart.

[0024] In these or other examples, the wheel chock cart can include a plurality of adjustment positions where the wheel chock basket(s) can be mounted. In some examples, the plurality of adjustment positions are interspaced along a support column or mounting post, including along front, side and/or rear faces of the support column.

[0025] A bottom shelf can be positioned at a bottom portion of the wheel chock cart (e.g., underneath the wheel chock basket(s). At least one battery or other power supply can be positioned on the bottom shelf to provide power to one or more components of the wheel chock cart. For example, the power supply can provide power to a light assembly or other illumination element associated with a whip attached to a top portion of the wheel chock cart. Likewise, the power supply can provide power to a charging dock (e.g., for charging martialing wands, computing devices (e.g., cell phones, tablets), hearing protection devices, etc.). Additionally or alternatively, in some examples the power supply can be charged via a solar array removably attachable to the wheel chock cart.

[0026] As just mentioned, the wheel chock cart can include a whip attachable to a whip mount. In these or other examples, a whip attached to the wheel chock cart can impart desired visibility and/or signaling attributes to the wheel chock cart, particularly for outdoor environments and/or around aircraft. For instance, via one or more whips attached to the wheel chock cart, the wheel chock cart can span a height that far exceeds a conventional delineator. The added height can, in some examples, reach an aircraft wing to provide visible and safe (e.g., pliant or flexible) contact between the whip(s) and the aircraft to signal the aircraft's relative positioning.

[0027] The wheel chock cart of the present disclosure can also provide enhanced visibility regardless of inclement weather, nighttime conditions, windy conditions, or jet wash (e.g., air turbulence from aircraft wake)—whereas typical carts or hand trucks would be near invisible or blown over/away in such conditions. Even with locked wheels, conventional carts would be easily blown over/away when exposed to jet wash, as an example. Conversely, the wheel chock cart of the present disclosure can include a robust,

self-standing design capable of remaining in place and withstanding harsh outdoor environmental/workplace conditions. For example, the bottom shelf and wheel chock basket(s) can provide a counterbalancing effect against jet wash and wind forces, particularly when the bottom shelf and/or wheel chock basket(s) are filled with power supplies and wheel chocks. The wheel chock basket(s) can also be height adjustable (e.g., to lower a center of gravity for the wheel chock cart).

[0028] These and other examples are discussed below with reference to FIGS. **1-10**. However, a person of ordinary skill in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes only and should not be construed as limiting. Furthermore, as used herein, a system, a method, an article, a component, a feature, or a sub-feature including at least one of a first option, a second option, or a third option should be understood as referring to a system, a method, an article, a component, a feature, or a sub-feature that can include one of each listed option (e.g., only one of the first option, only one of the second option, or only one of the third option), multiple of a single listed option (e.g., two or more of the first option), two options simultaneously (e.g., one of the first option and one of the second option), or combination thereof (e.g., two of the first option and one of the second option).

[0029] FIGS. **1**A-**1**B illustrate a wheel chock cart **100** in accordance with one or more examples of the present disclosure. In particular, FIG. **1**A illustrates the wheel chock cart **100** in an upright position when at rest (e.g., a self-standing position), and FIG. **1**B illustrates the wheel chock cart **100** in an angled position for pushing or pulling the wheel chock cart **100**.

[0030] As shown, the wheel chock cart **100** can include a wheel base **102**. The wheel base **102** can include a pair of wheels and one or more components associated with the pair of wheels. In some examples, the wheel base **102** can include an axle. The axle can include a shaft that rotates with the pair of wheels. In other examples, the axle can include a fixed shaft (where the pair of wheels rotate relative to the fixed axle via a bearing engagement. Additionally or alternatively, the wheel base **102** can include a pair of axle braces (discussed more below in relation to FIG. **5**).

[0031] The wheel chock cart **100** can further include a bottom shelf **104** attached to the wheel base **102**. The bottom shelf **104** can be sized and shaped to receive (e.g., store, hold, support, or transport) one or more objects. In particular examples, the bottom shelf **104** is sized and shaped to receive at least one power supply (not shown). Examples of the bottom shelf **104** can include any shelf, platform, deck, carrier, basket, holder, stand, rack, receptacle, bin, box, container, trestle, scaffold, framework, etc. As shown, the bottom shelf **104** includes a polygon-shaped bracket or frame defining a central opening. In this case, the bracket or frame of the bottom shelf **104** is rectangular shaped, albeit other polygonal shapes can be utilized. The bracket or frame of the bottom shelf **104** can include a lip or sidewall (e.g., to better retain one or more objects on or within the bottom shelf **104**). The central opening of the bottom shelf **104** can allow wind and water to pass through. In some implementations, however, the bottom shelf **104** forms a fully enclosed bottom surface.

[0032] In some examples, the bottom shelf **104** is removably attached to the wheel base **102**. In other examples, the bottom shelf **104** is integrally (e.g., permanently) attached to the wheel base **102**, such as via one or more welded joints. In particular examples, the bottom shelf **104** is integrally attached to the wheel base **102** via the axle braces (as will be discussed more below in relation to FIG. **5**).

[0033] As mentioned, the bottom shelf **104** can be sized and shaped to receive a power supply (or multiple power supplies). As used herein, the term "power supply" refers to any power source that can supply power to one or more components of the wheel chock cart **100** (e.g., to charge a battery, power a light assembly associated with whips **114**, and/or assist in moving or driving the wheel chock cart **100**). For example, a power supply can include fuel cells, battery cells, generators, alternators, solar power converters, motion-based converters (e.g., that convert vibrations or oscillations into power), etc. In particular implementations, a power supply can convert alternating current to direct current (or vice-versa) for charging or recharging components of the wheel chock cart **100**. Some particular examples of a power supply can include a switched mode power supply, an uninterruptible power supply, an alternating current power supply, a direct current power supply, a regulated power supply, a programmable power supply, a computer power supply, and a linear power supply. In at least one example, a power supply includes a rechargeable battery (e.g., a 12 volt, 600 amps rechargeable marine battery).

[0034] Further shown, the wheel chock cart **100** can include one or more wheel chock baskets **106** (e.g., a pair of wheel chock baskets). Like the bottom shelf **104**, the wheel chock baskets **106** can be sized and shaped to receive (e.g., store, hold, support, or transport) one or more objects. In particular examples, the wheel chock baskets **106** are sized and shaped to receive wheel chocks **108**, however. Examples of the wheel chock baskets **106** can include any shelf, platform, deck, carrier, basket, holder, stand, rack, receptacle, bin, box, container, trestle, scaffold, framework, etc. As shown (particularly in FIGS. **2-3**), the wheel chock baskets **106** include a polygon-shaped bracket or frame defining a central opening. In this case, the bracket or frame of the wheel chock baskets **106** are rectangular shaped, albeit other polygonal shapes can be utilized. The bracket or frame of the wheel chock baskets **106** can include a lip or sidewall (e.g., to better retain one or more objects on or within the wheel chock baskets **106**). The central opening of the wheel chock baskets **106** can allow wind and water to pass through. In some implementations, however, the wheel chock baskets **106** forms a fully enclosed bottom surface.

[0035] In one or more examples, the wheel chock baskets **106** are attached to a central support column **110** (e.g., a post, pillar, pole, upright, rod, stanchion, or support member). The wheel chock baskets **106** can be attached to the central support column **110** in various ways. For example, the wheel chock baskets **106** can be permanently affixed to the central support column **110**. In other examples, the wheel chock baskets **106** are removably attached to the central support column **110**. For instance, the wheel chock baskets **106** can be adjusted up or down to a desired height. In particular implementations, the wheel chock baskets **106** are height adjustable according to a plurality of attachment positions or apertures arranged along the central support column **110**. Additional detail with respect to the central support column **110** is provided below in relation to FIGS. **6**A-**6**B.

[0036] As mentioned, the wheel chock baskets **106** can be sized and shaped to receive the wheel chocks **108**. In particular examples, the wheel chock baskets **106** are form fitted to receive a particular size and/or type of wheel chock. As used herein, the term "wheel chock" refers to a barrier or stop that can, upon placement against a vehicle wheel, prevent movement (e.g., rotational movement) of the vehicle wheel. A wheel chock can include one or more chocking faces (e.g., a wheel-engagement surface, a wedging wall, a stop surface, a contact surface, a tire-grip surface, etc.). A wheel chock can include various other features (e.g., a handle, bracket, traction-enhancing features, base surface, etc.). In these or other examples, a wheel chock can be used with many different types of vehicles, including an automobile, trailer, tractor, truck, crane, aircraft, and other wheeled vehicles. However, in some cases, a wheel chock of can also inhibit movement for non-wheeled vehicles (e.g., track vehicles like snowmobiles, track skid steers, etc.).

[0037] In at least one example, the wheel chock baskets **106** are interchangeable with one or more different wheel chock baskets. For instance, the wheel chock baskets **106** (as shown) are sized and shaped to receive a first set of wheel chocks (e.g., having a first set of dimensions compatible with a first range of aircraft wheel sizes). The wheel chock baskets **106** can be interchanged with a different pair of wheel chock baskets that are sized and shaped to receive a second set of wheel chocks (e.g., having a second set of dimensions compatible with a second range of aircraft wheel sizes). In these or other examples, the first set of wheel chock dimensions can differ from the second set of wheel chock dimensions (as can the first range of aircraft wheel sizes differ from the second range of aircraft wheel sizes). In this manner, the wheel chock cart **100** can implement the wheel chock baskets **106** in a modular fashion, thereby lending to more versatile and customizable use of the wheel chock cart **100**.

[0038] Further shown, the wheel chock cart **100** can include a handle **112**. The handle **112** can include various structure for a user to grasp, hold, drive, steer, steady, manipulate, and/or support the wheel chock cart **100** (as shown specifically in FIG. **1**B). For example, the handle **112** can include a bar, grip, knob, lever, etc. In some examples (and as shown), the handle **112** can include a shaped bar that forms an opening, where each end of the shaped bar is attached to opposing sides of the central support column **110**.

[0039] In these or other examples, the handle **112** can be attached to a top portion of the central support column **110**. In other examples, the handle **112** is positioned between a top portion of the central support column **110** and the wheel chock baskets **106**. In alternative examples, the wheel chock cart **100** can include multiple handles.

[0040] Additionally, the wheel chock cart **100** can include one or more whips **114**. As used herein, the term "whip" refers to an elongate rod with a visual enhancement feature (e.g., a flag, light, and/or reflective surface). In particular examples, the whips **114** are semi-flexible or bendable and are designed to safely contact a vehicle (e.g., an aircraft wing) without causing damage to the vehicle or the whips **114**. Thus, the whips **114** of the wheel chock cart **100** can be utilized to guide, direct, and/or park an aircraft. Further, the whips **114** can do so in a highly visual manner via one or more visual enhancement features, such as a flag, light, or reflective surface. In at least one example, a power supply stored on the bottom shelf **104** (and/or a solar array electrically coupled to the whips **114**) can provide power to a light assembly of the whips **114** (see FIGS. **8**-**10**).

[0041] The whips **114** can be sized in various configurations (e.g., according to aircraft size). For example, the whips **114** can include a length of about 1 foot to about 20 feet, about 3 feet to about 15 feet, about 5 feet to about 10 feet, or about 6 feet to about 8 feet. Further, in some examples, the whips **114** can be interchanged for different sized whips (e.g., for use with different sized aircraft).

[0042] The whips **114** can be mounted to the central support column **110** in various ways, as will be described more below in relation to FIGS. **8**-**9**. In these or other examples, the whips **114** can be attached or mounted to the central support column **110** in various locations (and at a variety of orientations or angles relative to the central support column **110**). In some examples, the whips **114** are positioned at a top portion of the central support column **110** adjacent to the handle **112**. In other examples, the whips **114** are positioned at a midsection or lower portion of the central support column **110**.

[0043] It will be appreciated that the components of the wheel chock cart **100** can include one or more of a variety of different materials. In particular, the materials implemented by the wheel chock cart **100** can be resistant to the elements of outdoor environments, including rain, wind, snow, hail, dust, debris, extreme temperatures (e.g., below 32 degrees Fahrenheit and/or above 100 degrees Fahrenheit), etc. For instance, one or more portions of the wheel chock cart **100** can include material(s) that are resistant to corrosion. In particular examples, the wheel chock cart **100** implements a stainless steel material or a galvanized material. Additionally or alternatively, the wheel chock cart **100** can implement an elastomer material (e.g., rubber, silicone, etc.) or a similar overmolded material.

[0044] In at least one example, the wheel chock cart **100** can include a high-visibility material. As used herein, the term "high visibility material" refers to visibility-enhancing material or a visual aid. This high visibility material can include a myriad of different types of material (e.g., based on color luminance, photoluminescence, etc.). For example, the high visibility material can include a pigment (e.g., a colorant) having a color luminance greater than 50 percent. Such pigment can correspond to a hue with a natural luminance above 50 percent. Additionally or alternatively, the color luminance can exceed 50 percent by modifying saturation and/or lightness of the pigment.

[0045] In some examples, the high visibility material includes a chargeable light emissive material. As used herein, the term "chargeable light emissive material" refers to one or more elements capable of being charged (and recharged) to persistently emit light after exposure to light from a light source—with light energy or photons—that may be visible or invisible. In some embodiments, a chargeable light emissive material includes a mixture, alloy, or combination of elements with chargeable, light-emitting properties. A chargeable light emissive material can include a coating or layer (e.g., a dip coating or paint layer). A chargeable light emissive material can also include a discontinuous or weighted application of sprayed or printed material (e.g., particles, pigments, strips, layers, flecks, grains, drops, etc.). An example of a chargeable light emissive material includes luminescent materials (whether organic and/or synthetic)—including fluorescent materials,

phosphorescent materials, and/or chemiluminescent materials. It will be appreciated that at least fluorescent materials can promptly exhibit photoluminescence very shortly after photoexcitation of the fluorescent materials. Additionally, as some particular examples, a chargeable light emissive material can include ultraviolet phosphors, blue light emitting diode phosphors, infrared emitting phosphors, Anti-Stokes phosphors (i.e., up-converters), glow-in-the-dark phosphors, x-ray phosphors, and storage phosphors. Other examples of a chargeable light emissive material include radioluminescent materials and cathodoluminescent materials.

[0046] It will be appreciated that a chargeable light emissive material can include a glow-in-the-dark material (e.g., a material that generates a luminous response or "glowing" output after being excited, such as via UV radiation from the sun). Then, when the wheel chock cart **100** is positioned in a darker environment (e.g., a cloudy environment, a foggy environment, a stormy environment, a nighttime environment), the glow-in-the-dark material can at least temporarily maintain its excited state and correspondingly generate a luminous response (e.g., without the need to reflect environmental light). For instance, a glow-in-the-dark or phosphorescent material is a material that has a fluorescence for which the average lifetime of the excited atoms is greater than 10^{-8} seconds.

[0047] In particular examples, the high visibility material can generate a luminous response (e.g., emit light at one or more wavelengths) perceivable to an unaided human eye when the chargeable light emissive material is exposed to an exciting agent at temperatures below incandescence. Such a luminous response can occur during oxidation or after exposure to light or other radiation. A luminous response can be modulated with electrical stimulation or other form of synthetic excitation in some examples (e.g., via a UV light assembly, a power supply connected to the high visibility material, a chemical agent, etc.). However, the high visibility material can (additionally or alternatively) include materials that can generate a luminous response independent of synthetic excitation. For example, the natural elements (e.g., sunshine) can be sufficient for the high visibility material to generate the luminous response when the sunshine is gone.

[0048] In these or other examples, an "unaided human eye" is a naked eye of an average human observer having regular vision and that is not augmented or supplemented by lenses, microscopes, cameras, or other scopes or equipment used to discern wavelengths beyond the natural human eye. In certain examples, the luminous response of the high visibility material may be visible to the unaided human eye in darker environments, particularly at night and/or during inclement weather. In some embodiments, the unaided human eye, as referred to herein, can detect light of wavelengths from about 342 nanometers to about 770 nanometers.

[0049] In some examples, the high visibility material is integrally formed as part of the wheel chock cart **100** (e.g., the wheel base **102**, the bottom shelf **104**, the wheel chock baskets **106**, the central support column **110**, the handle **112** and/or the whips **114**)—whether embedded or otherwise irremovably positioned over one or more surfaces of the wheel chock cart **100** as a coating, molding, or spray-on application. In these or other examples, the high visibility material can lend to improved visibility of the wheel chock cart **100**, particularly at night and/or during inclement weather.

[0050] Modifications and additional/alternative use cases for various aspects of the wheel chock cart **100** are also herein contemplated. For example, the bottom shelf **104** can be implemented as an additional wheel chock basket. That is, the bottom shelf **104** can be used to carry/store a wheel chock in addition to (or alternatively to) a power supply or other object. In yet another example, the central support column **110** can support a wide variety of attachments in addition to (or alternatively to) the wand basket for marshalling wands, discussed in detail in FIG. **8**. For instance, the central support column **110** can provide removable attachment or storage for personal protection equipment (e.g., gloves, hearing protection, eye protection, helmets, etc.), tools, flashlights, devices (e.g., computing devices, remotes, walkie-talkies), a first-aid kit, emergency kit, fire extinguisher, etc. In a further example, the wheel chock cart **100** can include signage (e.g., with symbols, indicators, alphanumeric values, etc.)—whether removably or permanently attached to the wheel chock cart **100**—to aid the warning or direction of vehicle traffic. As a specific example, the wheel chock cart **100** can include signage designating a particular airport runway, terminal, or gate. In at least one example, the wheel chock cart **100** can include a solar array for charging a power supply and/or for providing power to a light assembly of the whips **114** (as discussed below in relation to FIG. **10**).

[0051] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIGS. **1A-1**B can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIGS. **1A-1**B.

[0052] FIGS. **2-4** illustrate additional views of the wheel chock cart **100** discussed above. In particular, FIGS. **2-4** respectively illustrate perspective, top, and side views of the wheel chock cart **100** in accordance with one or more examples of the present disclosure. In these figures, the wheel chocks **108** are omitted for illustration purposes.

[0053] In particular, FIG. **3** shows certain aspects of the bottom shelf **104** and the wheel chock baskets **106**. For example, the wheel chock baskets **106** can include a length **300** and a width **302**. As mentioned above, the wheel chock baskets **106** can be sized and shaped to fit a variety of wheel chocks. The length **300** and the width **302** can thus be sized and shaped accordingly. For example, the length **300** can include a length of about six inches to about four feet, about one foot to about three feet, or about two feet. Similarly, the width **302** can include a width of about four inches to about three feet, about six inches to about two feet, about eight inches to about 1.5 feet, or about one foot.

[0054] The bottom shelf **104** can include the same or similar dimensions. For example, the bottom shelf **104** can include a length **304** and a width **306**. As mentioned above, the bottom shelf **104** can be sized and shaped to fit a variety of objects, including one or more power supplies. The length **304** and the width **306** can thus be sized and shaped accordingly. For example, the length **304** can include a length of about four inches to about three feet, about six inches to about two feet, about eight inches to about 1.5 feet,

or about one foot. Similarly, the width **306** can include a width of about six inches to about four feet, about one foot to about three feet, or about two feet.

[0055] The bottom shelf **104** and the wheel chock baskets **106** can be attached to the central support column **110** and oriented in a variety of configurations. For example, FIG. **3** shows the wheel chock baskets **106** can be positioned forward of the central support column **110** and above the bottom shelf **104**. In particular, the wheel chock baskets **106** can extend longitudinally forward and away (i.e., approximately perpendicular) relative to a plane **308** (e.g., that is coplanar with a front face of the central support column **110**). Conversely, the bottom shelf **104** can extend approximately parallel to the plane **308** and laterally between the wheel base **102**, namely between the wheels and axle brackets. In other examples, however, at least one of the orientations of the bottom shelf **104** or the wheel chock baskets **106** can be rotated (e.g., about 90 degrees from the illustrated configuration). For instance, the bottom shelf **104** can be modified to extend longitudinally forward and away (i.e., approximately perpendicular) relative to the plane **308**.

[0056] FIG. **4** depicts various example height relationships of components of the wheel chock cart **100**, particularly when the wheel chock cart **100** is positioned upright in a resting state. In particular, the wheel chock baskets **106** can be positioned at a basket height **400**, where the basket height **400** is defined as the amount of vertical rise from a ground surface (or a bottom surface of the bottom shelf **104**) to the wheel chock baskets **106**. The basket height **400** can be adjusted to a desired height (e.g., via attachment positions on the central support column **110**, discussed in further detail below in relation to FIGS. **6**A-**6**B). As examples, the basket height **400** can be adjusted to various positions incrementally spaced between about three inches and about six feet, between about one foot and about five feet, or between about 1.5 feet and about four feet. In certain examples, the basket height **400** is adjustable up or down to affect a center of gravity for the wheel chock cart **100**. For instance, a lower basket height **400** can lower the center of gravity for the wheel chock cart **100** (thereby helping to stabilize the wheel chock cart **100** against wind forces or jet wash).

[0057] The wheel chock cart **100** can also include a cart height **402**. The cart height **402** can be defined as the amount of vertical rise from a ground surface to the topmost portion of the central support column **110**. Similarly, the wheel chock cart **100** can include a whip height **404**. The whip height **404** can be defined as the amount of vertical rise from a ground surface to the topmost portion of the whips **114**.

[0058] In these or other examples, the cart height **402** can range from about three feet to about seven feet, from about four feet to about six feet, or about five feet. In contrast, the whip height **404** can range from about six feet to about twenty feet, about eight feet to about fifteen feet, about nine feet to about thirteen feet, or about ten to twelve feet.

[0059] It will be appreciated that the whip height **404** is sized to provide a visual aid for all types of vehicles and operators (e.g., to define safe zones, prohibited zones, machinery zones, parking zones, or other designated areas). In particular examples, the whip height **404** is sized to provide a visual aid for aircraft pilots. Additionally, the whip height **404** can be sized to safely contact aircraft wings, which most conventional delineators are unable to do on account of being too short or prone to damaging the aircraft wings. For instance, the whip height **404** allows a pilot to maneuver an aircraft at a terminal or other outdoor environment and visualize where the aircraft is positioned in relation to the whips **114**. That is, the wheel chock cart **100** includes the whips **114** having the whip height **404** (and a corresponding whip orientation) that can align aircraft wing tips at predetermined positions in an outdoor environment (e.g., at a specific gate, at a parking stall in a hangar, etc.).

[0060] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIGS. **2**-**4** can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIGS. **2**-**4**.

[0061] FIG. **5** illustrates an assembled portion of the wheel chock cart **100**, including the wheel base **102** and the bottom shelf **104** in greater detail, in accordance with one or more examples of the present disclosure. As shown, the wheel base **102** can include wheels **500**, an axle **502** extending between the wheels **500**, and axle braces **504**. The axle braces **504** can include a variety of brackets, supports, wings, connections, joints, or braces attached to the axle **502**. In certain examples, the axle braces **504** can rotate or swivel freely relative to the axle **502** (and vice-versa). This rotational independence between the axle **502** and the axle braces **504** can allow the axle braces **504** (and the bottom shelf **104** and the mounting sleeve **506**) to pivot relative to the axle **502** as the wheel chock cart **100** moves between the upright position when at rest (shown in FIG. **1**A) and an angled position relative to the upright position for moving the wheel chock cart **100** (as shown in FIG. **1**B). The rotational independence between the axle **502** and the axle braces **504** also allows the axle **502** to freely rotate as the wheels **500** correspondingly rotate during movement of the wheel chock cart **100**.

[0062] In other examples, the axle braces **504** are fixed (e.g., welded) to the axle **502**, in which case the axle **502** can be a fixed (i.e., stationary) shaft. In this example, the axle braces **504** (together with the axle **502**) can pivot relative to the wheels **500** (e.g., due to a bearing engagement between the axle **502** and the wheels **500**).

[0063] In these or other examples, the bottom shelf **104** is integrally attached to the wheel base **102** via the axle braces **504**. For example, the bottom shelf **104** is welded to the axle braces **504**. Thus, the bottom shelf **104** can be permanently suspended from the axle braces **504** in some implementations.

[0064] Additionally shown, the wheel chock cart **100** can include a mounting sleeve **506** attached to the bottom shelf **104** (e.g., integrally attached at a rear side of the bottom shelf **104**). The mounting sleeve **506** can include any mount, base, support, attachment, or joint for connecting to the central support column **110**. That is, the central support column **110** can be removably attached to or otherwise disposed inside the mounting sleeve **506**. In particular examples, the mounting sleeve **506** can define a mounting sleeve opening **508** that is sized and shaped to receive a bottom portion of the central support column **110**. For instance, the mounting sleeve **506** can be designed as a female connection piece such that the bottom portion of the

central support column **110** can be inserted into the mounting sleeve opening **508**. In alternative implementations, however, the mounting sleeve **506** can be a male piece insertable into the bottom portion of the central support column **110**. Fasteners (e.g., bolts, pins, etc.) can be inserted through apertures **510** defined by the mounting sleeve **506** to secure the bottom portion of the central support column **110** and the mounting sleeve **506** together. The apertures **510** can be arranged along any surface of the mounting sleeve **506**. In this example, the apertures **510** are positioned at side surfaces of the mounting sleeve **506**.

[0065] The mounting sleeve **506** can further include an aperture **512** defined by one or more surfaces of the mounting sleeve **506**. The aperture **512** can be the same as or similar to the apertures **510**, but utilized for a different purpose. For example, the aperture **512** can be sized and shaped as a cable opening through which a power and/or data cable (not shown) can extend. For instance, a power cable can extend from a power supply positioned on the bottom shelf **104**, through the aperture **512** and into a corresponding opening in the central support column **110**, up through an interior volume of the central support column **110**, and connect with one or more components of the wheel chock cart **100** (e.g., a light assembly, a solar array, an actuator, etc.).

[0066] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIG. **5** can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIG. **5**.

[0067] FIGS. **6**A-**6**B respectively illustrate perspective and side views of the central support column **110** in accordance with one or more examples of the present disclosure. As mentioned, the central support column **110** can also be referred to as a post, pillar, pole, upright, rod, stanchion, or support member. The central support column **110** can therefore include a variety of configurations, shapes, sizes, and cross-sectional profiles. In particular examples, and as will be discussed more below, the central support column **110** can serve as the backbone or framework of the wheel chock cart **100** to which many components can be attached in a variety of ways and positions.

[0068] As shown, the central support column **110** can include a bottom portion **600** and a top portion **602**. The bottom portion **600** is removably attachable to the mounting sleeve **506**, as discussed above. For example, apertures **610** of the bottom portion **600** can align with apertures **510** of the mounting sleeve **506** such that fasteners can be inserted there through and join the central support column **110** and the mounting sleeve **506** together.

[0069] Similarly, aperture **612** defined by the bottom portion **600** can align with the aperture **512** of the mounting sleeve **506**. In this way, a power cable can extend through both the apertures **512**, **612** and into an interior volume **620** of the central support column **110** (e.g., for providing a power connection to one or more components of the wheel chock cart **100**).

[0070] In these or other examples, a power cable can extend through the interior volume **620** (defined by interior walls of the central support column **110**) and exit at one or more locations of the central support column **110**. For instance, the power cable can exit through an aperture **614** defined by the top portion **602** of the central support column **110** (e.g., for a power connection with a light assembly of the whips **114**, discussed more below in relation to FIGS. **8**-**9**).

[0071] The top portion **602** can also include apertures **616** for securing the handle **112** to the central support column **110** via fasteners. Additionally, the top portion **602** can include a whip mount attachment surface **618** upon which a whip mount can be attached (whether removably or permanently attached). In some examples, the whip mount attachment surface **618** includes a flat surface. In other examples, the whip mount attachment surface **618** includes a pair of angled surfaces oriented to form a top point, peak, or vertex of the central support column **110**. The angle of the whip mount attachment surface **618** can allow for a whip mount to be correspondingly angled (and therefore provide a V-shaped whip configuration). The V-shape configuration of whips can be visually distinctive or advantageous for visual signaling. Further, and as described below in relation to FIG. **9**, the angle of the whip mount (due to the whip mount attachment surface **618**) can impart water-shedding qualities that can improve water resistance of a power connection at or near the whip mount.

[0072] Additionally shown in FIGS. **6**A-**6**B, the central support column **110** can include a plurality of attachment positions or apertures, namely apertures **608**. The apertures **608** can be positioned along a front face **604** and/or a side face **606**. In particular implementations, the apertures **608** are positioned along both of the front face **604** and the side face **606**. The apertures **608** can be utilized for attaching one or more components to the central support column **110**. For example, the apertures **608** can be utilized for attaching the wheel chock baskets **106** to the central support column **110**, a wand bask (e.g., the wand basket **802** discussed below in relation to FIG. **8**), and a solar array (e.g., the solar array **1000** discussed below in relation to FIG. **10**). The apertures **608** can additionally or alternatively be utilized to attach accessory components or associated storage for items such as personal protection equipment (e.g., gloves, hearing protection, eye protection, helmets, etc.), tools, flashlights, devices (e.g., computing devices, remotes, walkie-talkies), a first-aid kit, emergency kit, fire extinguisher, etc.

[0073] It will be appreciated that the apertures **608** can include a variety of different spacing for a desired adjustment resolution between positions. For instance, the apertures **608** can have a spacing between apertures that ranges from about a quarter inch to about twelve inches, about a half inch to about eight inches, about one inch to about six inches, about three inches to about five inches, or about four inches. In certain examples, the apertures **608** can be labeled for convenient reference during positional adjustment of one or more components attachable to the central support column **110**.

[0074] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIGS. **6**A-**6**B can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations

thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIGS. **6**A-**6**B.

[0075] FIGS. **7**A-**7**C illustrate a connection between the wheel chock baskets **106** and the central support column **110** in accordance with one or more examples of the present disclosure. For illustration purposes, FIG. **7**A omits the central support column **110**.

[0076] As shown, the wheel chock cart **100** can include a mounting bracket **700**. In some examples, the mounting bracket **700** is attached (e.g., integrally attached or welded) to the wheel chock baskets **106**. In some examples, the mounting bracket **700** is positioned perpendicular to the wheel chock baskets **106**. In particular, the mounting bracket **700** can include flanges **704**, **706** that are attached to the wheel chock baskets **106**.

[0077] The mounting bracket **700** can further include an abutment surface **702** that can contact, abut, or be positioned adjacent to the front face **604** of the central support column **110**. In some examples, the abutment surface **702** can increase the surface area of contact with the central support column **110** (and therefore improve load distribution, bending moment resistance, and/or attachment stability than could otherwise be achieved with the wheel chock baskets **106** alone).

[0078] Additionally, the mounting bracket **700** can define apertures **708** for aligning with the apertures **608** of the central support column **110** (e.g., along the front face **604** of the central support column **110**). Fasteners can be positioned through the apertures **608**, **708** when aligned to secure the mounting bracket **700** (and therefore the wheel chock baskets **106**) to the central support column **110**.

[0079] The wheel chock baskets **106** can also include connection portions **710** defining apertures **712**. The connection portions **710** can include an extension (e.g., a bracket extension) of the wheel chock baskets **106**. The connection portions **710** and associated apertures **712** can be used to secure the wheel chock baskets **106** to the side face **606** of the central support column **110** via fasteners. The connection portions **710**, when connected to the side face **606**, can help improve lateral bending or torsional resistance of the wheel chock baskets **106** in another plane. Accordingly, the wheel chock baskets **106** can include at least two planes of connection to the central support column **110** (e.g., at the front face **604** and the side face **606** of the central support column **110**). In these or other examples, the two planes of connection to the central support column **110** can provide increased stability and torsional resistance in multiple planes for supporting the wheel chocks **108** on the wheel chock baskets **106**.

[0080] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIGS. **7**A-**7**C can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIGS. **7**A-**7**C.

[0081] FIG. **8** illustrates various components attached to the wheel chock cart **100** in accordance with one or more examples of the present disclosure. As shown, the wheel chock cart **100** can include a whip mount **800**. The whip mount **800** can include a bracket, shelf, support surface, or decking for attaching one or more whips **114**. Additional detail with respect to the whip mount **800** is discussed below in relation to FIG. **9**.

[0082] In some examples, the wheel chock cart **100** can additionally include a wand basket **802** adjustably positioned along the central support column **110** (e.g., via the apertures **608**). The wand basket **802** can include a bin, box, container, holder, retention element, etc. for placing and storing marshalling wands. In some examples, the wand basket **802** can include a charging dock **804** (e.g., a conductive and/or inductive charging dock). In some examples, the charging dock **804** can be integrated inside the wand basket **802** (e.g., for charging one or more marshalling wands). In other examples, the charging dock **804** can be integrated with the wand basket **802** via external attachment to the wand basket **802** (e.g., for inductive charging through the bottom wall of the wand basket **802**). It will be appreciated that the charging dock **804** can additionally (or alternatively) charge one or more other accessory devices (e.g., hearing protection devices, radios, computing devices, etc.).

[0083] In these or other examples, the charging dock **804** can be electrically coupled to a power supply of the wheel chock cart **100**. For example, the charging dock **804** can be connected to a power supply positioned on the bottom shelf **104** via a power cable (as discussed above). In yet another example, the charging dock **804** can be connected to a solar array attached to the central support column **110** (discussed below in relation to FIG. **10**).

[0084] Further shown in FIG. **8**, the wheel chock cart **100** can, in some examples, include a light assembly **806** integrated with the whips **114**. The light assembly **806** can include an illumination element, such as a light emitting diode, incandescent light, compact fluorescent light, halogen light, etc. In some implementations, the light assembly **806** can include a single bulb or light fixture housing that at least partially houses the illumination element. In other implementations, the light assembly **806** can include an arrangement of bulbs or light fixtures (e.g., a string of LEDs). The bulb or fixture housing of the light assembly **806** can also be positioned at a variety of locations (e.g., at a top pole of the whips **114**, along the rod portion of the whips **114**, or along a flag portion). The light assembly **806** can further include wiring that extends from the bulb or fixture housing to the power connection discussed below in relation to FIG. **9**.

[0085] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIG. **8** can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIG. **8**.

[0086] FIG. **9** illustrates a detailed view of the whip mount **800** in accordance with one or more examples of the present disclosure. As shown, the whip mount **800** can include brackets **900** positioned on the whip mount attachment surface **618**. The brackets **900** can be positioned in a variety

of positions and orientations (including a flat or horizontal orientation). In particular examples, however, the brackets **900** form an angle **908** relative to the central support column **110**. The angle **908** can define an orientation of the whips **114** (e.g., to form a V-shape orientation). Additionally, the angle **908** for the brackets **900** can define water-shedding directions **910**, **912**. In particular implementations, water (e.g., rain, snow, etc.) can impact the brackets **900** and proceed along the surface of the brackets **900** in water-shedding directions **910**, **912**. In this manner, the whip mount **800** can impart water-resistance at least by shedding water away from a power connection **906**. The power connection **906** can be defined as the electrical coupling between a whip connector **902** and a power cable **904**.

[0087] The whip connectors **902** can be defined as base portion or connection piece between the rod portion of the whips **114** and the brackets **900**. In particular, each whip connector **902** can include a respective attachment to the brackets **900** and another respective attachment (e.g., both mechanical and electrical) to one of the whips **114**. With respect to the electrical attachment of the whip connectors **902**, each light assembly **806** can include wiring that extends through the whips **114** and electrically couples to the whip connectors **902** to draw power through the power connection **906**. Additionally or alternatively, the light assembly **806** can include wiring that extends continuously through the whips **114** and the whip connectors **902** to the power connection **906**.

[0088] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIG. **9** can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIG. **9**.

[0089] As mentioned previously, a variety of different components and/or accessory devices can be attached to the wheel chock cart **100**. In accordance with one more such examples, FIG. **10** illustrates a solar array **1000** attachable to the wheel chock cart **100**. The solar array **1000** can include a grouping of photovoltaic cells (e.g., forming a solar panel). The solar array **1000** can convert solar energy into electrical power transmittable to one or more components of the wheel chock cart **100** (e.g., a power supply, the light assembly **806**, etc.) via a power cable **1006**. In some examples, the solar array **1000** can be used to recharge a power supply and/or offload power discharge from the power supply (particularly during daytime hours).

[0090] As shown, solar array **1000** is attachable to the central support column **110** via apertures **608**. The solar array **1000** is thus attachable to the central support column **110** in various orientations (e.g., in front-facing, side-facing, and/or rear-facing orientations). In particular examples, an attachment portion **1002** (e.g., an attachment bracket) of the solar array **1000** can include apertures **1004** for aligning with corresponding apertures **608** of the central support column **110**. Fasteners can then be inserted through the apertures **1004**, **608** upon alignment to secure the solar array **1000** to the central support column **110**.

[0091] Any of the features, components, and/or parts, including the arrangements and configurations thereof shown in FIG. **10** can be included, either alone or in any combination, in any of the other examples of devices, features, components, and parts shown in the other figures described herein. Likewise, any of the features, components, and/or parts, including the arrangements and configurations thereof shown and described with reference to the other FIGS. can be included, either alone or in any combination, in the example of the devices, features, components, and parts shown in FIG. **10**.

[0092] The foregoing description, for purposes of explanation, used specific nomenclature to provide a thorough understanding of the described examples. However, it will be apparent to one skilled in the art that the specific details are not required in order to practice the described examples. Thus, the foregoing descriptions of the specific examples described herein are presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the examples to the precise forms disclosed.

[0093] It will be apparent to one of ordinary skill in the art that many modifications and variations are possible in view of the above teachings. Indeed, various inventions have been described herein with reference to certain specific aspects and examples. However, they will be recognized by those skilled in the art that many variations are possible without departing from the scope and spirit of the inventions disclosed herein. Specifically, those inventions set forth in the claims below are intended to cover all variations and modifications of the inventions disclosed without departing from the spirit of the inventions. The terms "including" or "includes" as used in the specification shall have the same meaning as the term "comprising."

What is claimed is:

1. A wheeled cart, comprising:

a wheel base that includes a pair of wheels, axle braces positioned adjacent to each wheel of the pair of wheels, and an axle coupling the pair of wheels and extending through the axle braces;

a bottom shelf integrally attached to the wheel base via the axle braces, the bottom shelf sized and shaped to receive a power supply;

a mounting sleeve integrally attached to the bottom shelf;

a central support column removably disposed within and fastened to the mounting sleeve, the central support column having a plurality of attachment positions;

a whip mount positioned at a top portion of the central support column;

a handle attached to the central support column adjacent to the whip mount; and

a pair of wheel chock baskets positioned forward of the central support column and above the bottom shelf, the pair of wheel chock baskets being removably mounted to the central support column at a first attachment position of the plurality of attachment positions,

wherein the wheeled cart is self-standing in an upright position when at rest; and

wherein the wheeled cart is configured to be pushed or pulled when at an angled position relative to the upright position.

2. The wheeled cart of claim **1**, further comprising a wand basket removably mounted to the central support column at a second attachment position of the plurality of attachment positions.

3. The wheeled cart of claim 2, further comprising a charging dock positioned adjacent to or integrally formed within the wand basket.

4. The wheeled cart of claim 1, further comprising a power cable routed through the central support column to provide power to one or more components, the power cable connectable to the power supply.

5. The wheeled cart of claim 4, wherein the power cable extends to and is electrically connectable with the whip mount.

6. The wheeled cart of claim 1, further comprising a solar array removably attached to the central support column at a second attachment position of the plurality of attachment positions, the solar array electrically connectable with at least one of the power supply or the whip mount.

7. The wheeled cart of claim 1, further comprising a mounting bracket positionable longitudinally along the central support column, the mounting bracket being removably mounted to the central support column at a second attachment position of the plurality of attachment positions,

wherein the mounting bracket is positioned between and integrally attached to the pair of wheel chock baskets.

8. The wheeled cart of claim 7, wherein the mounting bracket is positioned perpendicular to the pair of wheel chock baskets.

9. The wheeled cart of claim 1, further comprising a whip attached to the whip mount.

10. The wheeled cart of claim 9, wherein the whip includes at least one of a flag, light, or reflective surface.

11. A cart for moving aviation wheel chocks in an outdoor environment, the cart comprising:

a bottom shelf sized and shaped to receive a power supply;

a mounting sleeve attached to the bottom shelf;

a post removably disposed within and fastened to the mounting sleeve, the post defining a plurality of apertures;

a whip mount attached to the post;

a whip attachable to the whip mount;

a handle attached to a top portion of the post; and

a pair of wheel chock baskets removably mounted to the post at an aperture of the plurality of apertures.

12. The cart of claim 11, wherein the cart is configured to be visible in the outdoor environment during nighttime or inclement weather.

13. The cart of claim 11, wherein the cart is configured to self-stand and remain in place when exposed to jet wash or windy conditions.

14. The cart of claim 11, wherein when the whip is attached to the whip mount, the whip is sized and oriented at a height to align aircraft wing tips at predetermined positions in the outdoor environment.

15. The cart of claim 11, wherein the pair of wheel chock baskets is height adjustable from the aperture of the plurality of apertures to a different aperture of the plurality of apertures.

16. The cart of claim 11, wherein the whip includes a light assembly powered by the power supply.

17. The cart of claim 11, wherein:

the whip mount comprises a power connection to the power supply; and

the whip mount is angularly oriented relative to the post such that, upon exposure to water, the water is shed away from the power connection.

18. A wheel chock cart, comprising:

a bottom shelf sized and shaped to receive a power supply;

a mounting sleeve attached to the bottom shelf;

a post removably disposed within and fastened to the mounting sleeve, the post defining a plurality of apertures;

a whip mount attached to the post;

a whip attachable to the whip mount and comprising a light assembly;

a power cable extending through the post and connectable with the light assembly;

a handle attached to a top portion of the post;

a pair of wheel chock baskets removably mounted to the post at a first aperture of the plurality of apertures; and

a wand basket removably mounted to the post at a second aperture of the plurality of apertures.

19. The wheel chock cart of claim 18, wherein the pair of wheel chock baskets is interchangeable with a different pair of wheel chock baskets.

20. The wheel chock cart of claim 19, wherein:

each wheel chock basket of the pair of wheel chock baskets is sized and shaped to receive a first wheel chock; and

each wheel chock basket of the different pair of wheel chock baskets is sized and shaped to receive a second wheel chock different from the first wheel chock.

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