

ECLA EUROPEAN CLASSIFICATION

A01D HARVESTING; MOWING [N: (parts, details or accessories of agricultural machines or implements in general [A01B51/00](#) to [A01B75/00](#))]

Notes

1. This subclass covers the shredding or pulverising of stubble, e.g. for the purpose of producing mulch, but does not cover other mechanical destruction of unwanted vegetation, which is covered by group [A01M21/02](#)
2. In this subclass, in groups [A01D34/00](#), [A01D42/00](#), [A01D43/00](#), [A01D57/00](#), [A01D67/00](#), [A01D69/00](#) and [A01D75/00](#), it is desirable to add the indexing code of group [K01D101/00](#)

Guide heading: **Hand implements** (devices for picking apples or like fruit [A01D46/24](#); soil-working implements not specially adapted for harvesting [A01B1/00](#))[[C0311](#)]

A01D1/00 Hand-cutting implements for harvesting (hedge trimming means [A01G3/04](#); [N: hand-cutting in general [B26](#); making from sheet metal [B21D53/72](#); making by rolling [B21H7/10](#)])

- [A01D1/02](#) . Scythes
- [A01D1/04](#) . Sickles
- [A01D1/06](#) . Knives
- [A01D1/08](#) . Attaching means for blades
- [A01D1/10](#) . . with fastening by means of eccentric levers
- [A01D1/12](#) . . with blades adjustable in several ways
- [A01D1/14](#) . Handles; Accessories, e.g. scythe baskets, safety devices

A01D3/00 Non-abrasive sharpening devices for scythes, sickles or the like (abrasive or similar sharpening devices [B24D15/06](#))

- [A01D3/02](#) . with percussive tools
- [A01D3/04](#) . with pressing jaws
- [A01D3/06](#) . with pressing rollers or pressing discs
- [A01D3/08](#) . Details, e.g. scythe anvils, scythe guides

A01D5/00 Containers for whetstones for use during harvesting (whetting implements [B24D15/00](#))

A01D7/00 Rakes (mowers convertible to rakes or capable of raking [A01D42/02](#); mowers combined

with rakes [A01D43/02](#); haymakers, crop conditioners [A01D76/00](#) to [A01D84/00](#); [N: making rakes from sheet metal [B21D53/68](#); making rakes by rolling [B21H7/08](#)][C0401]

[A01D7/02](#) . with tines rigidly connected to the rake-bar

[A01D7/04](#) . with adjustable rake-bar

[A01D7/06](#) . with tines specially shaped or attached

[A01D7/08](#) . with exchangeable tines

[A01D7/10](#) . combined with strippers, grippers or the like

[A01D9/00](#) **Forks** [N: (making forks from sheet metal [B21D53/68](#); making forks by rolling [B21H7/08](#))][C0311]

[A01D9/02](#) . with tines rigidly connected to the handle

[A01D9/04](#) . with exchangeable tines

[A01D9/06](#) . combined with strippers, grippers or the like

[A01D11/00](#) **Other hand implements** [N: (for maize [A01D45/02H](#), for cotton [A01D46/08H](#))][C0402]

[A01D11/02](#) . for lifting or cropping beet, potatoes or other root crops

[A01D11/02B](#) . . [N: Knives for topping beets]

[A01D11/04](#) . for handling root crops, e.g. shovels, fork-like shovels

[A01D11/06](#) . Combined implements, e.g. fork and rake

Guide heading: **Machines for harvesting root crops**

[A01D13/00](#) **Diggers, e.g. potato ploughs**

[A01D15/00](#) **Digging machines with sieve graters but without conveying mechanisms**

[A01D15/02](#) . with rigid graters

[A01D15/04](#) . with moving or vibrating graters

[A01D17/00](#) **Digging machines with sieving and conveying mechanisms**

[A01D17/02](#) . with conveyers arranged above the sieving device

[A01D17/04](#) . with conveyers arranged below the sieving device

- A01D17/06 . with rollers or disc screens
- A01D17/08 . with shaker type screens
- A01D17/10 . with smooth conveyer belts, lath bands or rake bands
- A01D17/10B . . [N: with two superposed conveyer belts]
- A01D17/12 . with bucket conveyers
- A01D17/14 . with cylindrical screens
- A01D17/16 . . with a conveyer spiral
- A01D17/18 . . without a conveyer spiral
- A01D17/20 . . with several co-operating screens
- A01D17/22 . . with several co-operating sifter bands

A01D19/00 Digging machines with centrifugal wheels, drums or spinners

- A01D19/02 . with working tools rotating around a horizontal axis arranged transverse to the direction of travel
- A01D19/04 . with working tools rotating around a horizontal axis arranged parallel to the direction of travel
- A01D19/06 . . with scoop wheels or drums
- A01D19/08 . . with scoop tine chains
- A01D19/10 . . with receiving screens; Implements for depositing the root crops
- A01D19/12 . with working tools arranged on an approximately vertical axis
- A01D19/14 . . with one screening wheel
- A01D19/16 . . with several screening wheels
- A01D19/18 . . with screen tine chains

A01D21/00 Digging machines with potato-picking implements

- A01D21/02 . with picking tools moved up-and-down
- A01D21/04 . with rotating picking tools

A01D23/00 Topping machines

- A01D23/02 . cutting the tops before being lifted
- A01D23/04 . cutting the tops after being lifted ([processing of harvested produce in bulk A01F29/00, A23N](#))
- A01D23/06 . with collecting and depositing devices for the tops; Devices for protecting the tops against damage

A01D25/00 Lifters for beet or like crops

- A01D25/00B . [N: Auxiliary devices for the lifters]
- A01D25/02 . Machines with rigid tools
- A01D25/04 . Machines with moving or rotating tools
- A01D25/04B . . [N: with driven tools]
- A01D25/04B1 . . . [N: with driven rotating tools]
- A01D25/04B2 . . . [N: with oscillating tools]
- A01D25/04B3 . . . [N. with endless chains]

A01D27/00 Machines with both topping and lifting mechanisms

- A01D27/02 . with rigid tools
- A01D27/04 . with moving or rotating tools

A01D29/00 Harvesters for peanuts

A01D31/00 Other digging harvesters [N: (for harvesting asparagus [A01D45/00F](#))]

- A01D31/02 . combined with other agricultural machines, e.g. drilling, planting, hay-harvesting machines

A01D33/00 Accessories for digging harvesters

- A01D33/02 . Foliage-separating mechanisms
- A01D33/04 . Stone-separating mechanisms
- A01D33/06 . Haulm-cutting mechanisms
- A01D33/08 . Special sorting and cleaning mechanisms
- A01D33/10 . Crop collecting devices, with or without weighing apparatus
- A01D33/10B . . [N: Devices for gathering the crop in a row]
- A01D33/12 . Driving mechanisms, with or without motor
- A01D33/14 . Lifting or lowering mechanisms for the tools

Guide heading: **Harvesters or mowers for grass, cereals, or other crops** ([component parts thereof A01D57/00 to A01D69/00](#); [accessories therefor A01D75/00](#)) [\[C0311\]](#)

A01D34/00 Mowers ([combined with apparatus performing additional operations while mowing A01D37/00 to A01D41/00, A01D43/00](#); convertible to apparatus for purposes other than mowing or capable of performing operations other than mowing [A01D42/00](#)); **Mowing apparatus of harvesters**[\[C0304\]](#)

- A01D34/00A . [N: Accessories not otherwise provided for]
- A01D34/00A3 . . [N: Means for cleaning the machine]
- A01D34/00A4 . . [N: Mulching means]

- A01D34/00D . [N: Control or measuring arrangements][N0304]
- A01D34/00D2 . . [N: for automated or remotely controlled operation][N0304]

- A01D34/01 . characterised by features relating to the type of cutting apparatus[N0304]
- A01D34/01C . . [N: Cutting mechanisms not covered by another group][N0304]
- A01D34/02 . . having reciprocating cutters [C0304]
- A01D34/03 . . . mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle[N0304]
- A01D34/03B [N: drawn by an animal or a vehicle][N0304]
- A01D34/03B3 [N: with cutter bars driven by a power take-off from the vehicle][N0304]
- A01D34/03C [N: with additional power-supply][N0304]
- A01D34/04 with cutters at the front[N0304]
- A01D34/04A [N: for cutting at the side][N0304]
- A01D34/04B [N: drawn by an animal or a vehicle][N0304]
- A01D34/06 with cutters at the side[N0304]
- A01D34/06B [N: drawn by an animal or a vehicle][N0304]
- A01D34/07 with cutters at the back[N0304]
- A01D34/08 . . . hand-guided by a walking operator
- A01D34/10 with motor driven cutters or wheels
- A01D34/125 . . . with means for discharging mown material ([A01D57/26](#) to [A01D57/30](#) take precedence; combined with means for gathering or loading mown material [A01D43/06](#))[N0311]

- A01D34/13 . . . Cutting apparatus
- A01D34/135 having oppositely movable cooperating knife-bars[N0304]
- A01D34/14 Knife-bars
- A01D34/14B [N: Devices for connecting the knife-bars to the driving mechanism]
- A01D34/16 Guides for the knife-bar in the ledger-plate
- A01D34/17 Holding-down devices for the knife[N0304]
- A01D34/18 Guard fingers; Ledger-plates[N0304]
- A01D34/20 Ledger-plate bars
- A01D34/22 Shoes therefor
- A01D34/23 with additional vertical cutter-bar
- A01D34/24 . . . Lifting devices for the cutter-bar
- A01D34/24C [N: Mechanical lifting devices ([A01D34/26](#) takes precedence)]
- A01D34/24D [N: Hydraulic lifting devices]
- A01D34/26 manually actuated
- A01D34/27 Devices for disengaging the knife-driving mechanisms during the lifting of the cutter-bar
- A01D34/28 . . . Adjusting devices for the cutter-bar
- A01D34/28B [N: Adjustment of the cutter bar in a vertical plane, i.e. to adjust the angle]

- between the cutter bar and the soil]
- A01D34/28C [N: Adjustment of the cutter bar on a horizontal plane, i.e. to adjust the angle between the cutter bar and the tractor]
- A01D34/30 Driving mechanisms for the cutters
- A01D34/30B [N: Balancing]
- A01D34/32 Connecting-rods for knife-driving mechanisms
- A01D34/33 Devices for connecting the rod to the knife-bar
- A01D34/34 Devices for connecting the rod to the crank-pin of the driving mechanism
- A01D34/36 actuated by advance of the machine
- A01D34/37 electric
- A01D34/38 fluid
- A01D34/40 Other details
- A01D34/404 having cutters driven to oscillate in a horizontal plane [N0305]
- A01D34/408 and cooperating with counter-cutters[N0305]
- A01D34/412 having rotating cutters[N0305]
- A01D34/416 Flexible line cutters [N0212]
- A01D34/416B [N: Means for feeding cutter line] [N0212]
- A01D34/416B1 [N: automatically] [N0212]
- A01D34/416B2 [N: by triggered line feedout, e.g. bump-feeding] [N0212]
- A01D34/416C [N: Mounting of the cutter head] [N1204]
- A01D34/416D [N: Mounting or replacement of the lines] [N1204]
- A01D34/416E [N: Protection devices] [N1204]
- A01D34/416F [N: Constructional details of the flexible lines] [N1204]
- A01D34/42 having cutters rotating about a horizontal axis, e.g. cutting-cylinders
- A01D34/43 mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle
- A01D34/43F [N: Flail harvesters or mowers (cutting flails [A01D34/535](#))] [N0310]
- A01D34/44 with two or more cutters
- A01D34/46 hand-guided by a walking operator([A01D34/43](#) takes precedence)
- A01D34/47 with motor driven cutters or wheels
- A01D34/47B [N: Driving mechanisms (for the cutters [A01D34/56](#))]
- A01D34/49 with means for discharging mown material ([A01D57/26](#) to [A01D57/30](#) take precedence; combined with means for gathering or loading mown material [A01D43/06](#))[N0311]
- A01D34/52 Cutting apparatus
- A01D34/53 Helically shaped cutting members
- A01D34/535 with cutting members pivotally attached to the rotating axle, e.g. flails[N0305]
- A01D34/54 Cutting-height adjustment
- A01D34/56 Driving mechanisms for the cutters
- A01D34/57 actuated by advance of the machine
- A01D34/58 electric
- A01D34/60 fluid
- A01D34/62 Other details

- A01D34/63 . . . having cutters rotating about a vertical axis
- A01D34/64 mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle
([A01D34/695](#) takes precedence)
- A01D34/66 with two or more cutters
- A01D34/66A [N: Mounting means]
- A01D34/66A2 {7 dots} [N: to the front of the vehicle]
- A01D34/66B [N: Disc cutter bars]
- A01D34/66B2 {7 dots} [N: modular]
- A01D34/66C [N: Means for directing the cut crop]
- A01D34/66C2 {7 dots} [N: rotating]
- A01D34/67 hand-guided by a walking operator
- A01D34/68 with motor driven cutters or wheels
- A01D34/68B [N: Driving mechanisms (for the cutters [A01D34/76](#))]
- A01D34/68B2 {7 dots} [N: Braking or clutching mechanisms] [N9411]
- A01D34/68B3 {7 dots} [N: Motor starting mechanisms] [N9411]
- A01D34/685 with two or more cutters[N0305]
- A01D34/69 with motor driven wheels[N0305]
- A01D34/695 supported by an air cushion[N0305]
- A01D34/71 with means for discharging mown material ([A01D57/26](#) to [A01D57/30](#)take precedence; combined with means for gathering or loading mown material [A01D43/06](#))[N0311]
- A01D34/73 Cutting apparatus
- A01D34/73A [N: Cutting-blade mounting means]
- A01D34/73B [N: Flail type] [N1204]
- A01D34/74 Cutting-height adjustment
- A01D34/76 Driving mechanisms for the cutters
- A01D34/77 actuated by advance of the machine
- A01D34/78 electric
- A01D34/80 fluid
- A01D34/81 Casings; Housings ([A01D34/71](#) takes precedence)[N0305]
- A01D34/82 Other details
- A01D34/82G [N: Devices for guiding or supporting cables]
- A01D34/82H [N: Handle arrangements]
- A01D34/82N [N: Noise reduction means]
- A01D34/82S [N: Safety devices]
- A01D34/83 . . having cutting members on endless belts or sprocket chains
- A01D34/83B . . . [N: with blades on endless belts]
- A01D34/83C . . . [N: with blades on endless sprocket chains]
- A01D34/835 . specially adapted for particular purposes[N0305]
- A01D34/835S . . [N: for cutting up or crushing remaining standing stalks, e.g. stubble (mowers combined with means for cutting up, crushing or bruising, the mown crop [A01D43/08](#), [A01D43/10](#); apparatus for crushing or bruising mown stalks [A01D82/00](#); apparatus for cutting up the mown crop [A01F29/00](#))] [N0410]

- A01D34/84 . . for edges of lawns or fields, e.g. for mowing close to trees or walls ([N: for embankments [A01D34/86](#) takes precedence;])(hand-held edge trimmers [A01G3/06](#))
- A01D34/86 . . for use on sloping ground, e.g. on embankments [N: or in ditches](undercarriages or frames specially adapted for harvesters or mowers [A01D67/00](#); control mechanisms for harvesters or mowers when moving on slopes [A01D75/28](#))
- A01D34/86A . . . [N: and for mowing around obstacles, e.g. posts, trees, fences or the like ([A01D34/86B](#) takes precedence)]
- A01D34/86B . . . [N: Mounting means]
- A01D34/90 . . for carrying by the operator[N0302]
- A01D34/90A . . . [N: Ergonomic provisions] [N1204]
- A01D34/90D . . . [N: Vibration dampening means] [N1204]

- A01D37/00** **Reaper-binders** (features relating to mowing only [A01D34/00](#), to binding only [A01D39/00](#); equipment thereon for binding harvested produce, e.g. knotters, [A01D59/00](#); [N: bundling articles [B65B13/00](#)])
- A01D37/02 . with receiving platform and binding apparatus but without elevating canvases [N: (knotting [D04G](#))]
- A01D37/04 . conveying the stalks in vertical position [N: (delivering devices for standing stalks [A01D57/22](#))]
- A01D37/06 . binding with stalks or straw bands [N: (implements for laying-out bands for sheaves [A01D75/16](#))]

- A01D39/00** **Independent binders, e.g. for hay; Binders attachable to mowers** (equipment thereon for binding harvested produce, e.g. knotters, [A01D59/00](#); stationary apparatus or hand tools for forming or binding hay or straw into bundles [A01F1/00](#); [N: bundling articles [B65B13/00](#); knotting [D04G](#)])
- A01D39/00B . [N: Binders combined with devices for picking-up the harvest]

- A01D41/00** **Combines, i.e. harvesters or mowers combined with threshing devices** (threshing devices for combines [A01F7/00](#) to [A01F12/00](#)) [C0311]
- A01D41/02 . Self-propelled combines
- A01D41/04 . Tractor-driven combines
- A01D41/06 . Combines with headers
- A01D41/08 . Combines with thresh before the stalk is cut
- A01D41/10 . Field threshers with windrow pick-up apparatus
- A01D41/12 . Details of combines
- A01D41/12D . . [N: Tanks for grain or chaff (for threshing machines [A01F12/60](#))] [C0311]
- A01D41/12D1 . . . [N: Unloading mechanisms] [N1204]

- A01D41/12D2 . . . [N: Extension mechanisms] [N1204]
- A01D41/12F . . [N: Platforms for sacking]
- A01D41/12G . . [N: Devices for laying-out or distributing the straw]
- A01D41/12J . . [N: Anti-dust devices]
- A01D41/12L . . [N: Access devices for personnel]
- A01D41/127 . . Control or measuring arrangements specially adapted for combines
- A01D41/127A . . . [N: for measuring crop flow] [N0302] [C1205]
- A01D41/127A1 [N: for measuring grain flow] [N1204]
- A01D41/127A1B [N: for measuring grain loss] [N1204]
- A01D41/127B . . . [N: for drives] [N0302]
- A01D41/127C . . . [N: for the level of grain in grain tanks] [N0302]
- A01D41/127D . . . [N: for cleaning mechanisms] [N0302]
- A01D41/127G . . . [N: for measuring grain quality] [N1204]
- A01D41/127S . . . [N: for automatic steering][N0402][C0402]
- A01D41/133 . . Drying devices[N0302]
- A01D41/14 . . Mowing tables
- A01D41/14B . . . [N: Automatic header control]
- A01D41/14D . . . [N: Header drives]
- A01D41/14F . . . [N: Foldable headers]
- A01D41/14L . . . [N: Header lifting devices]
- A01D41/14S . . . [N: Sunflower header attachments]
- A01D41/14T . . . [N: Telescopic headers]
- A01D41/16 . . . Devices for coupling mowing tables to conveyers[N0305]

A01D42/00 **Mowers convertible to apparatus for purposes other than mowing; Mowers capable of performing operations other than mowing (mowers combined with apparatus performing additional operations while mowing [A01D43/00](#))[N0310]**

- A01D42/00M . . [N: Mulching (shredders or like cutting implements for comminuting plant waste per se [A01G3/00B](#))] [N0310]
- A01D42/02 . . Raking[N0310]
- A01D42/04 . . Soil working[N03]
- A01D42/06 . . Sweeping or cleaning lawns or other surfaces [N: (sweeping apparatus for lawns per se [A01G1/12B](#))] [N0310]
- A01D42/08 . . Sweeping snow[N0310]

A01D43/00 **Mowers combined with apparatus performing additional operations while mowing ([A01D37/00](#), [A01D39/00](#), [A01D41/00](#), take precedence) [C0105]**

- A01D43/00B . . [N: with devices for drying or burning] [C0105]
- A01D43/00C . . [N: with devices for pressing or compacting] [N9603] [C0105]

- A01D43/02 . with rakes
- A01D43/04 . with haymakers, e.g. tedders [C0105]
- A01D43/06 . with means for collecting, gathering or loading mown material [N: ([A01D43/08D](#) takes precedence; for hay or the like [A01D87/00](#))] [C0311]
- A01D43/063 . . in or into a container carried by the mower; Containers therefor ([A01D43/077](#) takes precedence)[N0311]
- A01D43/063C . . . [N: Control devices specially adapted therefor][N0311]
- A01D43/063D . . . [N: with compacting means][N0311]
- A01D43/063E . . . [N: with emptying means][N0311]
- A01D43/063F . . . [N: Flexible containers] [N1204]
- A01D43/063R . . . [N: Rigid containers] [N1204]
- A01D43/07 . . in or into a trailer ([A01D43/077](#) takes precedence)[N0311]
- A01D43/073 . . . with controllable discharge spout[N0311]
- A01D43/077 . . with auxiliary means, e.g. fans, for transporting the mown crop[N0311]
- A01D43/077A . . . [N: for airborne lawn-mowers][N0311]
- A01D43/08 . with means for cutting up the mown crop, [N: e.g. forage harvesters (threshing machines having chaff-cutters [A01F12/40](#); cutting apparatus of chaff-cutters or of apparatus for cutting up mown crop [A01F29/00](#))] [C0312]
- A01D43/08A . . [N: specially adapted for ensilage of maize][N0402]
- A01D43/08A2 . . . [N: Gathering units][N0402]
- A01D43/08A2B [N: with belts or chains][N0402]
- A01D43/08C . . [N: Control or measuring arrangements specially adapted therefor][N0312]
- A01D43/08D . . [N: and means for collecting, gathering or loading mown material][C0311]
- A01D43/08D2 . . . [N: with controllable discharge spout][C0311]
- A01D43/08M . . [N: Mounting means]
- A01D43/10 . with means for crushing or bruising the mown crop [N: (stalk crushers or bruisers per se for standing stalks or stubbles [A01D34/835S](#), for mown crop [A01D82/00](#), for straw [A01F12/40](#))] [C0402]
- A01D43/10C . . [N: Bruising control devices] [N9603]
- A01D43/10D . . [N: Driving mechanisms] [N9603]
- A01D43/10M . . [N: Mounting means] [N9603]
- A01D43/12 . with soil-working implements, e.g. ploughs [C0105]
- A01D43/14 . with dispensing apparatus, e.g. for fertilisers, herbicides or preservatives [N0105]
- A01D43/16 . with lawn edgers [N0105]
- A01D44/00** **Harvesting of underwater plants, e.g. harvesting of seaweed**
- A01D44/02 . of laver
- A01D45/00** **Harvesting of standing crops ([A01D44/00](#) takes precedence; threshing machines**

adapted for special crops, threshing devices for combines adapted for special crops
[A01F11/00](#)][C0401]

- A01D45/00A . [N: with arrangements for transport of personnel]
- A01D45/00B . [N: of pineapples]
- A01D45/00C . [N: of millet, sorghum]
- A01D45/00D . [N: of mushrooms]
- A01D45/00E . [N: of tomatoes]
- A01D45/00F . [N: of asparagus]
- A01D45/00K . [N: of cucumbers]
- A01D45/02 . of maize [N: , i.e. kernel harvesting (for ensilage maize [A01D43/08A](#))][C0402]
- A01D45/02C . . [N: Cornheaders][N0402]
- A01D45/02C2 . . . [N: Gathering chains of belts][N0402]
- A01D45/02C4 . . . [N: Snapping rolls][N0402]
- A01D45/02H . . [N: Hand implements][N0402]
- A01D45/02N . . [N: Harvesting devices mounted to a vehicle][N0402]
- A01D45/04 . of rice
- A01D45/06 . of flax [N: or similar fibrous plants]
- A01D45/06B . . [N: of fibrous plants other than flax, e.g. ramie, sisal, hemp, jute, Spanish grass, raffia]
- A01D45/10 . of sugar cane [N: (for digging sugar cane [A01D31/00](#))]
- A01D45/16 . of tobacco
- A01D45/22 . of beans
- A01D45/24 . of peas
- A01D45/26 . of cabbage or lettuce
- A01D45/26L . . [N: of lettuce]
- A01D45/26S . . [N: of Brussels sprouts]
- A01D45/28 . of spinach
- A01D45/30 . of grass-seeds or like seeds
- A01D46/00** **Picking of fruits, vegetables, hops, or the like; Devices for shaking trees or shrubs**

Note:

In this group, group [A01D46/30](#) takes precedence over groups [A01D46/02](#) to [A01D46/28](#) [C0311]

- A01D46/00B . [N: picking or shaking pneumatically (of cotton [A01D46/10](#))] [C0311]
- A01D46/02 . of hops
- A01D46/04 . of tea
- A01D46/06 . of coffee
- A01D46/08 . of cotton
- A01D46/08A . . [N: with harvesters characterised by transversally adjustable row units] [C0401]
- A01D46/08B . . [N: with harvesters characterised by basket means] [C0401]
- A01D46/08B1 . . . [N: with compacting means]
- A01D46/08C . . [N: Control or measuring arrangements specially adapted for cotton harvesters] [C0401]
- A01D46/08H . . [N: Hand implements] [N0402]
- A01D46/08L . . [N: with harvesters characterised by the lubricant distribution systems]
- A01D46/10 . . pneumatically [N: ([A01D46/08A](#) to [A01D46/08L](#) take precedence)]
- A01D46/12 . . using boll-from-plant strippers [N0401]
- A01D46/14 . . using lint-from-plant pickers [N0401]
- A01D46/16 . . . using rotary or oscillating spindles [N0401]
- A01D46/18 mounted on rotary carrier [N0401]
- A01D46/20 . Platforms with lifting and lowering devices
- A01D46/22 . Baskets or bags attachable to the picker
- A01D46/24 . Devices for picking apples or like fruit ([A01D46/28](#) [N: and [A01D46/00B](#)] takes precedence) [C0311]
- A01D46/24D . . [N: Accessories specially adapted for manual picking, e.g. ladders, carts] [C0311]
- A01D46/247 . . Manually operated fruit-picking tools ([A01D46/26](#) takes precedence) [N0311]
- A01D46/253 . . Portable motorised fruit pickers [N0311]
- A01D46/26 . Devices for shaking trees or shrubs; Fruit catching devices to be used therewith ([A01D46/28](#) takes precedence) [C0311]
- A01D46/26F . . Devices for beating or vibrating the foliage; Fruit catching devices to be used therewith [N0311]
- A01D46/28 . Vintaging machines, i.e. grape harvesting machines
- A01D46/28B . . [N: with means for separating leaves and grapes, e.g. pneumatical means like blowing or aspirating devices] [C0311]
- A01D46/30 . Robotic devices for individually picking crops [N0311]
- A01D47/00** **Headers** [N: for topping of plants, e.g. stalks with ears]

A01D51/00 **Apparatus for gathering together crops spread on the soil, e.g. apples, beets, nuts, potatoes, [N: cotton, cane sugar]**

A01D51/00B . [N: for apples or nuts]

A01D51/00C . [N: Loaders for beets, beetleaf or potatoes]

A01D51/00D . [N: for grains]

Guide heading: **Components of harvesters or mowers for grass or cereals (mowing apparatus A01D34/00; wheels B60B; wheel scrapers B60S1/68)[C0311]**

A01D57/00 **Delivering mechanisms for harvesters or mowers [C0311]**

A01D57/01 . Devices for leading crops to the mowing apparatus [N0211]

A01D57/02 . . using reels [C0211]

A01D57/02B . . . [N: with synchronised driving means] [C0211]

A01D57/03 . . . with supplementary controlled movement of the crop-engaging members, e.g. of the tines [N: (A01D57/02B takes precedence)] [C0211]

A01D57/04 . . . Arrangements for changing the position of the reels

A01D57/05 . . . Detachable reels for converting a mower into a harvester [N0211]

A01D57/06 . . using endless conveyers [C0211]

A01D57/08 . . using swinging rakes [C0211]

A01D57/10 . . using fans [C0211]

A01D57/12 . Rotating rakes

A01D57/14 . Single-platform rakes

A01D57/16 . Tilting tables

A01D57/18 . Bunching devices, e.g. with tipping bars

A01D57/20 . with conveyer belts

A01D57/22 . for standing stalks

A01D57/24 . Grass-boards

A01D57/26 . Plates arranged behind the cutter-bar for guiding the cut grass or straw

A01D57/28 . Windrower attachments with tines

A01D57/30 . Rotating attachments for forming windrows

A01D59/00 **Equipment for binding harvested produce (specially adapted for baling presses A01F15/14; bundling articles for packaging in general B65B13/00)**

- A01D59/02 . Packers
- A01D59/04 . Knotters
- A01D59/06 . Needles
- A01D59/08 . Discharge arms
- A01D59/10 . Devices for separating cohering sheaves
- A01D59/12 . Containers for the twine (twine balls or their manufacture [B65H](#))
- A01D59/14 . Sheaf counters

- A01D61/00** **Elevators or conveyers for binders or combines** [N: conveying in general [B65G](#); hoisting, lifting in general [B66](#)]
- A01D61/00B . [N: transversal conveying devices]
- A01D61/00B2 . . [N: with cylindrical tools]
- A01D61/00B3 . . [N: with rollers, e.g. adjustable]
- A01D61/00C . [N: for longitudinal conveying, especially for combines]
- A01D61/02 . Endless belts
- A01D61/04 . Chains

- A01D63/00** **Outside dividers**
- A01D63/02 . Rotating dividers
- A01D63/04 . Non-rotating dividers

- A01D65/00** **Grain-crop lifters**
- A01D65/02 . Lifting fingers
- A01D65/04 . with revolving staffs
- A01D65/06 . Lifting devices arranged on the inner side of the cutter-bar
- A01D65/08 . Guard attachments for the wheels

- A01D67/00** **Undercarriages or frames specially adapted for harvesters or mowers** (coupling arrangements between animal or tractor and harvester or mower [A01B59/00](#)); **Mechanisms for adjusting the frame** (adjusting devices for the cutter-bar [A01D34/28](#)); **Platforms**
- A01D67/00B . [N: Arrangements of coupling devices]

- A01D67/02 . Protection against weather
- A01D67/04 . Seats
- A01D69/00** **Driving mechanisms or parts thereof for harvesters or mowers (driving mechanisms for the cutters of mowers or harvesters [A01D34/00](#))[C0311]**
- A01D69/00B . [N: driven by power take-off]
- A01D69/00C . [N: Non electric hybrid systems, e.g. comprising mechanical and/or hydraulic and/or pneumatic drives] [N1204]
- A01D69/00H . with separate hand drive for cutting tools [N0311]
- A01D69/02 . electric
- A01D69/02H . . [N: Electric hybrid systems] [N1204]
- A01D69/03 . fluid
- A01D69/06 . Gearings
- A01D69/08 . Clutches
- A01D69/10 . Brakes
- A01D69/12 . Lubrication
- A01D75/00** **Accessories for harvesters or mowers [C0311]**
- A01D75/00C . [N: Carriers for the transport of harvesters or mowers][N0311][C0402]
- A01D75/00C2 . . [N: for mowers][N0311]
- A01D75/00C4 . . [N: for lawn-mowers][N0311]
- A01D75/00T . [N: Tool-carrying means][N0406]
- A01D75/02 . Implements for collecting grain crop
- A01D75/04 . Sheaf carriers
- A01D75/06 . Sheaf shockers or stokers
- A01D75/06B . . [N: hand-operated]
- A01D75/08 . Sharpening apparatus fixed to the harvester or mower (sharpening machines or devices per se [B24B](#), [B24D](#))
- A01D75/10 . Devices for reconditioning the knife-bar e.g. removing the knife from its backing
- A01D75/12 . Instruments for removing the knife-bar from the cutter
- A01D75/16 . Implements for laying-out bands for sheaves

- A01D75/18 . Safety devices for parts of the machines ([safety devices in general F16P](#))
- A01D75/18A . . [N: Avoiding overload] [N1204]
- A01D75/18C . . [N: Avoiding collisions with obstacles] [N1204]
- A01D75/18F . . [N: Removing foreign objects] [N1204]

- A01D75/20 . Devices for protecting men or animals ([safety devices in general F16P](#))
- A01D75/20P . . [N: for mowers carried by operator] [N1204]

- A01D75/24 . Special devices for harvesters or mowers drawn by animals[C0311]
- A01D75/24B . . [N: Poles]
- A01D75/24C . . [N: Devices for harnessing]

- A01D75/26 . Front trucks; Axle-pivot steering of front trucks
- A01D75/26B . . [N: Support wheels for poles or supporting devices]

- A01D75/28 . Control mechanisms for harvesters or mowers when moving on slopes; Devices preventing lateral pull[C0311]
- A01D75/28A . . [N: acting on the grain cleaning and separating device ([grain cleaners, separators per se A01F12/44](#))]
- A01D75/28B . . [N: with arrangements for holding the harvesting or mowing apparatus in a horizontal position][C0311]
- A01D75/28C . . [N: acting on the mowing table ([A01D75/28B takes precedence](#))]

- A01D75/30 . Arrangements for trailing two or more mowers
- A01D75/30B . . [N: for mowers positioned one behind the other or side by side]
- A01D75/30C . . [N: for lawn mowers positioned one behind the other or side by side]

Guide heading: **Haymakers (combined with mowers A01D43/04); Crop Conditioners**

Note

In groups [A01D76/00](#) to [A01D87/00](#), the following terms are used with the meanings indicated:

- "hay" includes all mowed forage crop in a dry or partially dry state;
- "haymakers" covers all apparatus working on mowed forage cropliyng on the ground with the intention to make hay, with the exception of "rakes" which are covered by group [A01D7/00](#)

A01D76/00 Haymakers with tines that are stationary with respect to the machine during operation but that may be liftable for dumping

- A01D76/00B . [N: Hand-operated wheeled rakes ([hand-operated rakes A01D7/00](#))]
- A01D76/00C . [N: Hay-sweeps ([rakes for making stacks A01D85/00B](#); [sweep rakes A01D87/08](#))]

A01D78/00 Haymakers with tines moving with respect to the machine

- A01D78/00B . [N: Side-delivery rakes (A01D78/04 takes precedence)] [N1204]
- A01D78/00B1 . . [N: Drum-turner-tedders with lateral discharge]
- A01D78/00B2 . . [N: Drum-turner-tedders with throwing wheel]

- A01D78/00C . [N: Turners; Tedders]
- A01D78/00C1 . . [N: Rotating turners]
- A01D78/00C1B . . . [N: Control mechanisms therefor]
- A01D78/00C2 . . [N: with forks]

- A01D78/02 . with tine-carrying bars or equivalent members which interconnect heads rotating about horizontal axes, e.g. of rotary-drum type
- A01D78/04 . . the tine-carrying members moving obliquely or at right angles to the direction of travel of the machine

- A01D78/06 . with tine-carrying endless chains or belts

- A01D78/08 . with tine-carrying rotary heads or wheels
- A01D78/10 . . the tines rotating about a substantially vertical axis
- A01D78/10B . . . [N: Arrangements to facilitate transportation specially adapted therefor (A01D78/10C takes precedence; for other agricultural machines or implements A01B73/00; carriers A01D80/00C)][C0402]
- A01D78/10B1 [N: Folding frames]
- A01D78/10C . . . [N: Telescopic frames]
- A01D78/10D . . . [N: Pivotal rotor support arms (A01D78/10B takes precedence)]
- A01D78/10D1 [N: pivotable by orientation of the support wheels]
- A01D78/10E . . . [N: Steering devices]
- A01D78/10F . . . [N: Ground support for rotors]
- A01D78/10G . . . [N: Drive mechanisms]
- A01D78/10H . . . [N: Arrangements of tines (A01D78/10B takes precedence)]
- A01D78/10J . . . [N: Having only one rotor] [N1204]
- A01D78/10K . . . [N: Having only one row of rotors arranged on the same horizontal line perpendicular to the advance direction of the machine] [N1204]
- A01D78/10L . . . [N: Having two rows of rotors on two different horizontal lines perpendicular to the advance direction of the machine] [N1204]
- A01D78/10M . . . [N: Having more than two rows of rotors on more than two different horizontal lines perpendicular to the advance direction of the machine] [N1204]
- A01D78/12 . . . the tines having an additional movement superimposed upon their rotary movement
- A01D78/12B [N: by a guiding track]
- A01D78/14 . . the tines rotating about a substantially horizontal axis
- A01D78/14A . . . [N: Arrangements for transport by movement of the heads carrying rake arms] [N1204]
- A01D78/14A1 [N: in a vertical plane] [N1204]
- A01D78/14A2 [N: in a horizontal plane] [N1204]
- A01D78/14C . . . [N: Rakes having only one heads carrying arm] [N1204]
- A01D78/16 . . . with positive drive of the heads or wheels

- A01D78/18 . of the reciprocating tine type
- A01D78/20 . . the tines reciprocating in a direction parallel to the direction of travel of the machine

- A01D80/00** **Parts or details of [N: , or accessories for,] haymakers (parts or details specific for one type of machine, see the relevant groups for these machines)[C0402]**

- A01D80/00C . [N: Carriers for the transport of haymakers (Arrangements of the haymaker to facilitate transportation [A01D78/10B](#))] [N0402][C0402]
- A01D80/02 . Tines; Attachment of tines

- A01D82/00** **Crop conditioners, i.e. machines for crushing or bruising stalks (combined with harvesters [A01D43/10](#))**

- A01D82/02 . Rollers for crop conditioners

- A01D84/00** **Haymakers not provided for in a single one of groups [A01D76/00](#) to [A01D82/00](#)**

- A01D84/02 . with flexible tools

- A01D85/00** **Arrangements for making or setting stacks**

- A01D85/00B . [N: making or setting stacks of cereals or grass, e.g. rack formers, fixed haystacks (rakes for making windrows, haysweeps [A01D76/00C](#); drying racks [A01F25/12](#))]
- A01D85/00B1 . . [N: with binding equipment, e.g. binding groups of bales]
- A01D85/00B2 . . [N: with pressing equipment, e.g. vehicles for forming stacks]

- A01D85/00F . [N: Forming groups of bales, e.g. bale sledges (loaders for bales [A01D87/12](#); vehicles for loading bales [A01D90/08](#))]

- A01D87/00** **Loaders for hay or like field crops (combined with mowers [A01D43/06](#); [N: loading in forage silos [A01F25/18](#);]; loading in general [B65G](#), [B66](#))[C0311]**

- A01D87/00C . [N: with chopping devices (harvesters with loaders [A01D43/06](#); forage harvesters [A01D43/08](#); special adaptations of cutting machines for hay, straw or fodder [A01F29/00](#))]

- A01D87/00D . [N: Arrangements for making a strand (forming round bales [A01F15/07](#))]

- A01D87/00F . [N: Coupling arrangements between tractors, loaders or vehicles (for harvesters [A01D67/00B](#))]

- A01D87/00G . [N: with gripping or clamping devices (manure loaders [A01C3/04](#))]

- A01D87/00H . [N: Dumpboxes or metering devices for loading or unloading]

- A01D87/00K . [N: Distributing devices at the delivery side of loaders]

- A01D87/00L . [N: Tractor-mounted loaders (buck-rakes, transporting rakes [A01D87/08](#); manure

- loaders [A01C3/04](#); fork loaders, fork lifts [B66F](#); earth-moving machines [E02F](#)]
- A01D87/00L2 . . [N: mounted on the three-point lifting system of the tractor]
- A01D87/00L4 . . [N: mounted on the tractor but having their own lifting device]
- A01D87/00L4B . . . [N: Front loaders]
- A01D87/00L4C . . . [N: Rear loaders]
- A01D87/00L6 . . [N: Accessories]
- A01D87/02 . with conveyer belts [N: or conveyor chains, with or without pick-up means]
- A01D87/04 . . with rakes feeding crop to the conveyor
- A01D87/06 . with oscillating or reciprocating rake-bars
- A01D87/08 . with sweep rakes, [N: i.e. buck-rakes, e.g. transporting rakes (gripping or clamping devices [A01D87/00G](#); fork loaders [A01D87/00L](#))]
- A01D87/10 . with blowers [N: (blowing and conveying [B65G53/00](#); loading or distributing arrangements in forage silos [A01F25/18](#))]
- A01D87/12 . Loaders for sheaves, stacks or bales
- A01D87/12B . . [N: for sheaves, stacks]
- A01D87/12C . . [N: for bales on the ground (vehicles for loading [A01D90/08](#))]
- A01D87/12D . . [N: mounted on the press without laying down the bales]
- A01D87/12F . . [N: Loaders for stacks or groups of bales]
- A01D87/12G . . [N: Apparatus for handling, loading or unrolling round bales]
- A01D89/00** **Pick-ups for loaders, chaff-cutters, balers, field-threshers, or the like** [N: i.e. attachments for picking-up hay or the like field crops (field threshers with windrow pick-up apparatus [A01D41/10](#))]**[C0311]**
- A01D89/00B . [N: Pick-up systems]
- A01D89/00B1 . . [N: Rotors]
- A01D89/00B2 . . [N: Endless belts]
- A01D89/00C . [N: Mountings, e.g. height adjustment, wheels, lifting devices]
- A01D89/00D . [N: Drives]
- A01D89/00E . [N: Accessories (feeding devices for baling presses [A01F15/10](#); for cutting machines [A01F29/10](#))]
- A01D89/00E1 . . [N: Devices for preparing the picking-up of the window]
- A01D89/00E2 . . [N: Devices cooperating with the pick-up]
- A01D90/00** **Vehicles for carrying harvested crops with means for self-loading or unloading** (combined with mowers [A01D43/06](#); load transporting vehicles modified to facilitate loading in general [B60P](#); bucket cars, i.e. having scraper bowls [E02F3/64](#))**[C0311]**
- A01D90/02 . Loading means [N: (loaders [A01D87/00](#); pick-ups [A01D89/00](#))]

- A01D90/04 . . with additional cutting means [C0311]
- A01D90/06 . . . with chaff cutters, [N: i.e. choppers] used as loading and cutting means (A01D43/08 takes precedence)
- A01D90/08 . . with bale-forming means additionally used for loading; with means for picking-up bales and transporting them into the vehicle [C9607]
- A01D90/08B . . . [N: Round-bale trailers (trailers in general B62D)]
- A01D90/10 . Unloading means [N: (manure distributors A01C3/06)]
- A01D90/10B . . [N: Automatic side-emptying forage wagons]
- A01D90/12 . with additional devices or implements (arrangements of coupling devices A01B59/00)
- A01D90/14 . Adaptations of gearing for driving, loading or unloading means
- A01D90/16 . self-propelled

- A01D91/00** **Methods for harvesting agricultural products (essentially requiring the use of particular machines, see the relevant groups for the machines)**

- A01D91/02 . Products growing in the soil
- A01D91/04 . Products growing above the soil (fruit, hops A01D46/00)

- A01D93/00** **Harvesting apparatus not provided for in other groups of this subclass [N0903]**