May 10, 1966 W. G. PRINTZ ETAL 3,250,483

UNWIND OR BACKSTAND FOR WEB WINDING APPARATUS

Filed Oct. 16, 1963 4 Sheets-Sheet 1

FIG. 1

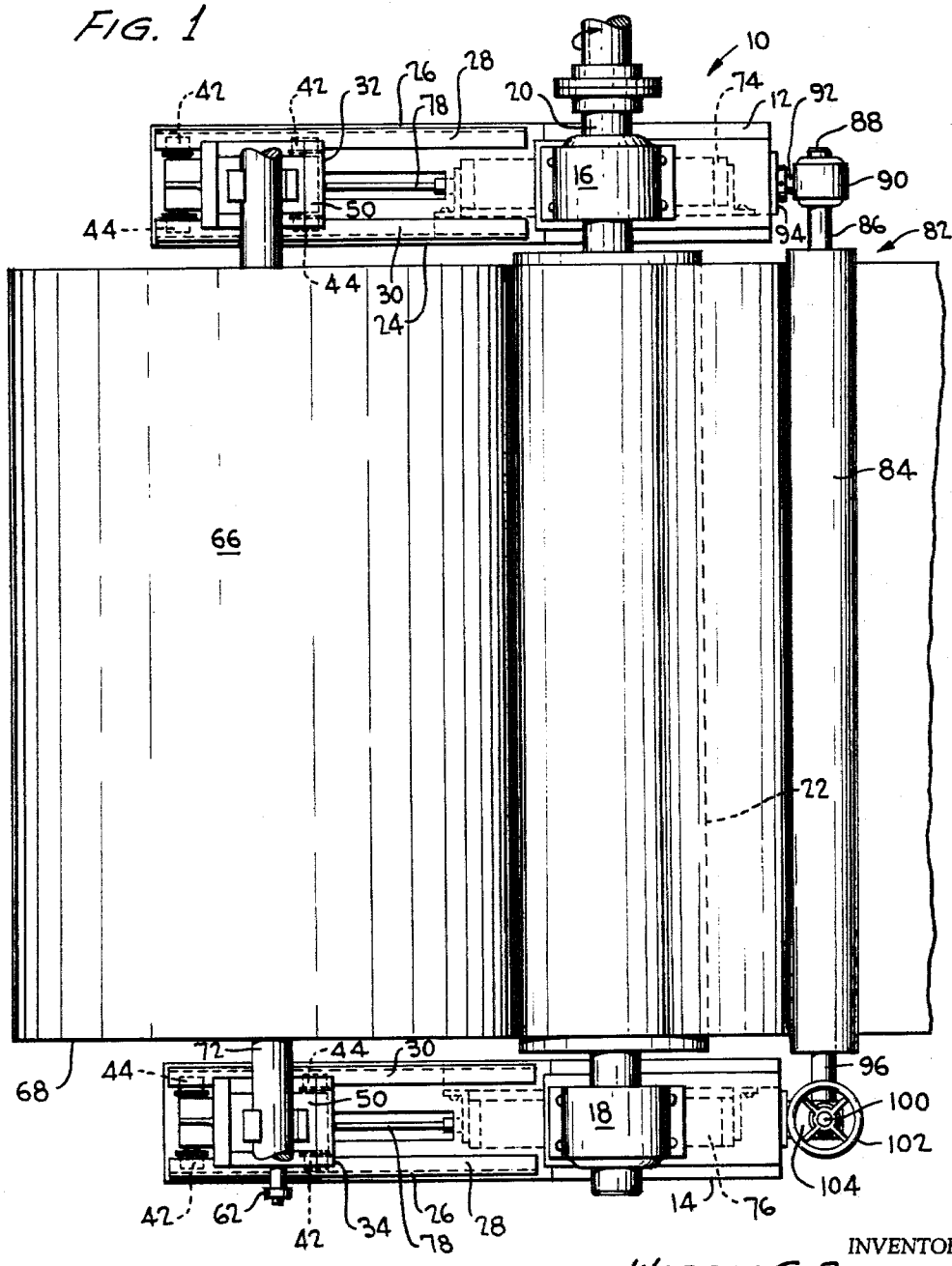

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FIG. 2

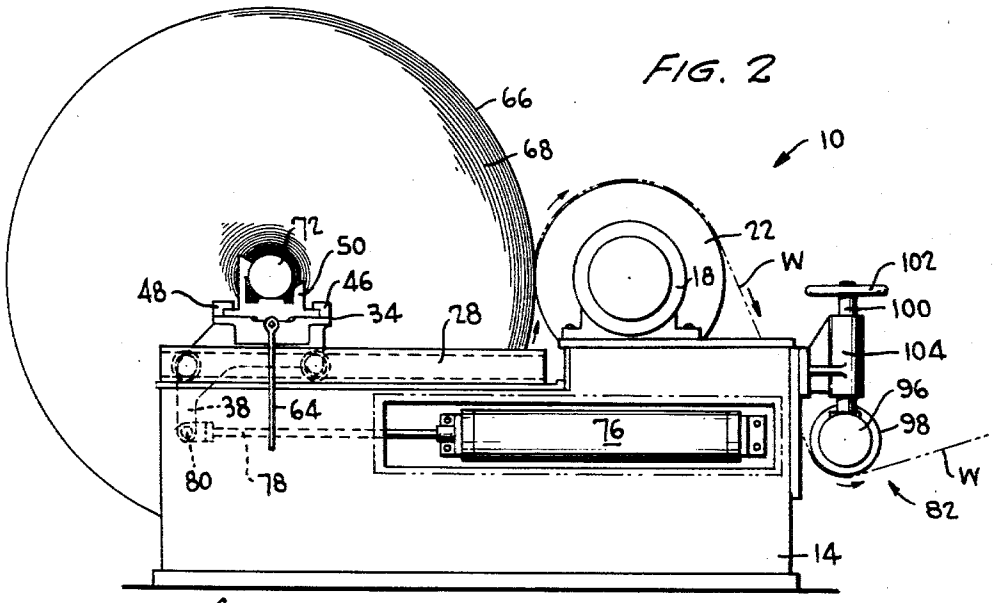


FIG. 3

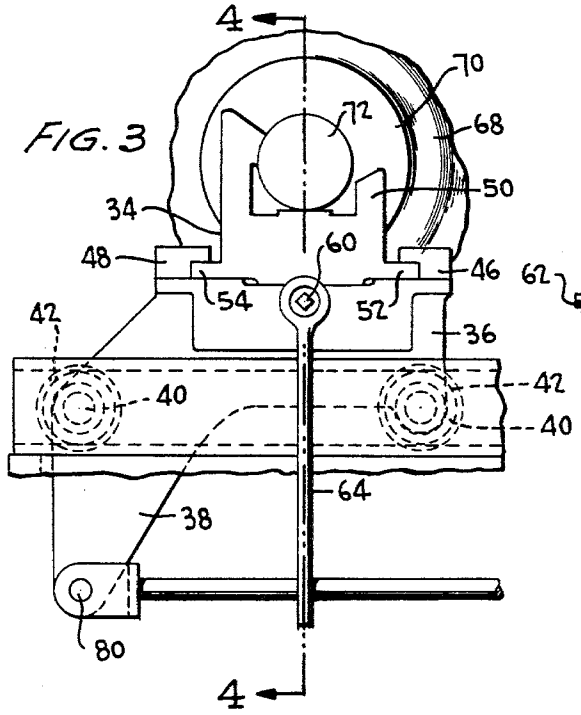
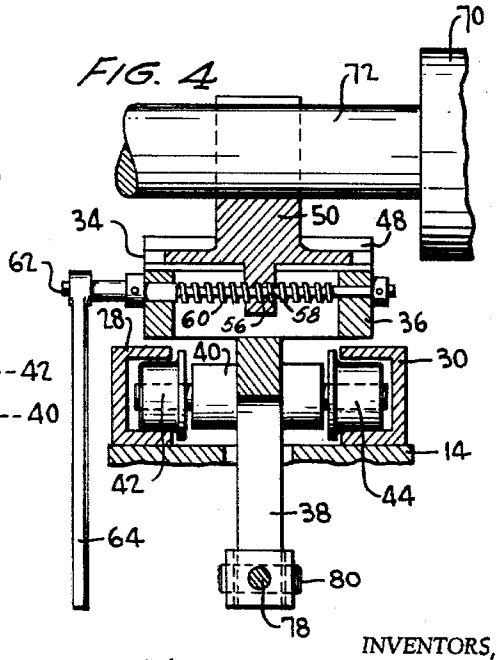


FIG. 4



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UNWIND OR BACKSTAND FOR WEB WINDING APPARATUS

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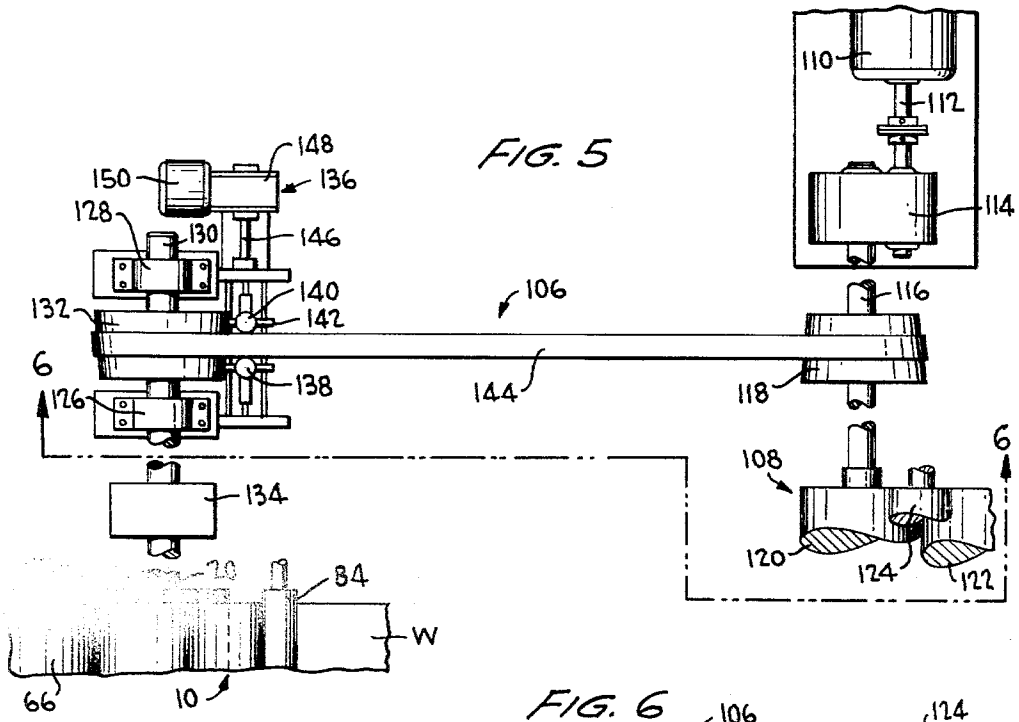

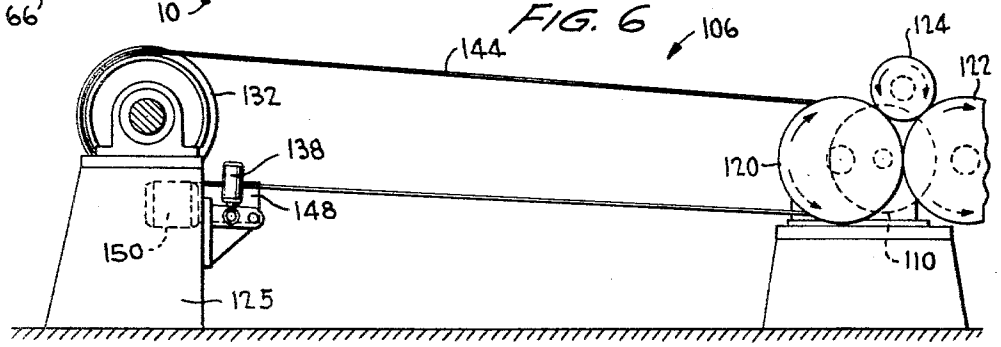

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UNWIND OR BACKSTAND FOR WEB WINDING APPARATUS

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FIG. 7

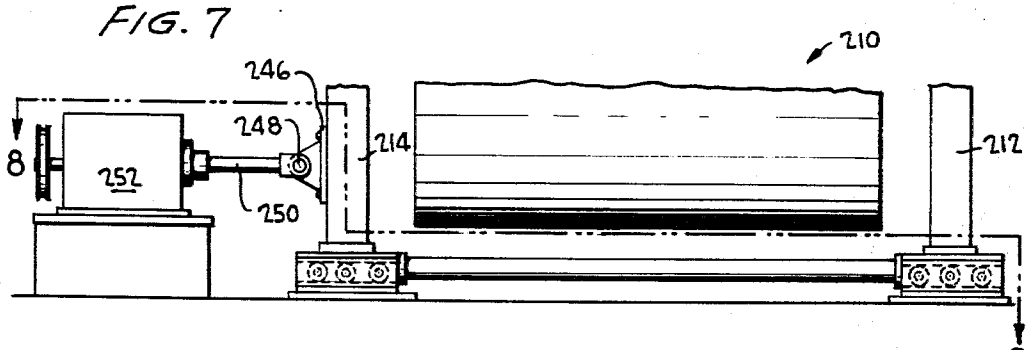
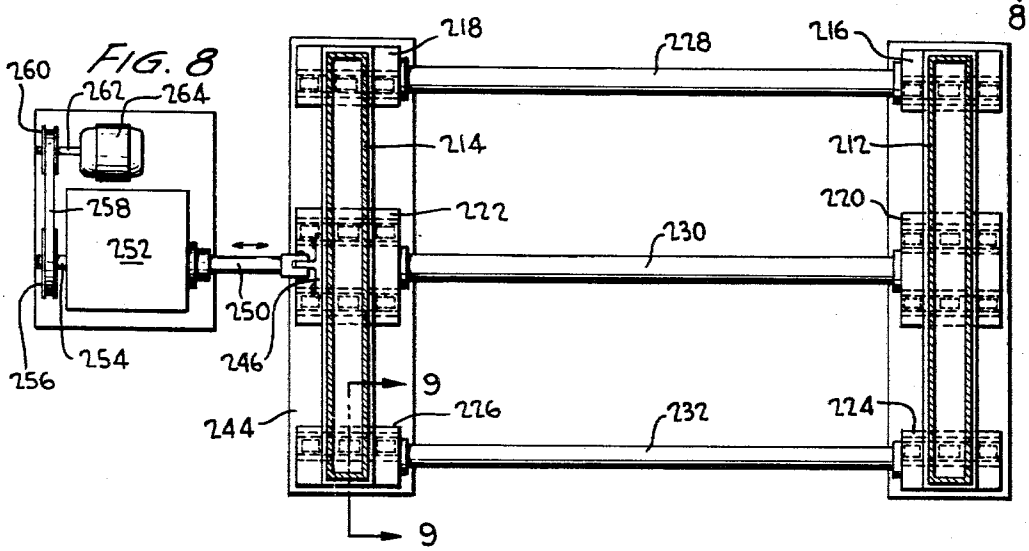


FIG. 8



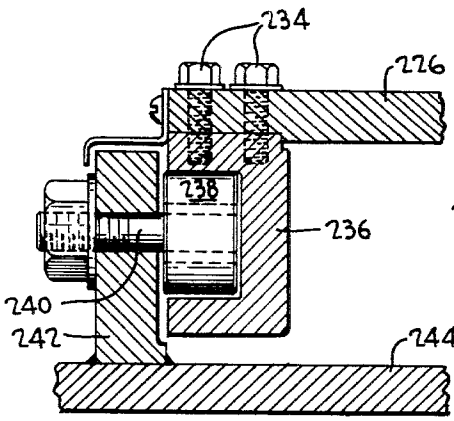


FIG. 9

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3,250,483

UNWIND OR BACKSTAND FOR WEB WINDING APPARATUS

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Filed Oct. 16, 1963, Ser. No. 316,636
9 Claims. (Cl. 242—65)

This invention relates to an improved unwind stand or backstand which is an essential auxiliary of a web winding machine.

Generally speaking, stock material is received from the manufacturer as a relatively huge parent roll and during production of various products such as adding machine tape, letterheads, toilet tissue, etc. the parent roll of web material is unwound and wound into narrower new rolls on a slitter-winder machine.

The present invention pertains to the apparatus facilitating the unwinding of a web from a stock material from a parent roll and to various control mediums incorporated therein. While the separate control mediums have a specific function in the apparatus, they combine to provide a mutual sensitivity to regulate and smooth out unevenness of the suuply web which is being unwound.

As a web of stock material is drawn by winder drums on winder apparatus and caused to be wound into new rolls, unequal internal tensions in the parent roll are released to cause fluctuations in tension of the supply web between the backstand and the slitter-winder apparatus. Irregular and oval shaped parent rolls often contribute to the difficulties of controlling and unwinding web, since the payout rate of the supply web varies continually throughout each revolution, causing the web to be tugged or jerked.

A primary object of the present invention is directed to a versatile combination of relatively simple controls to dissipate and compensate for irregularities and tension normally present in a supply or parent roll.

Inasmuch as the winder machine or slitter-winder apparatus and backstand are complementary, one to the other, i.e. they function simultaneously as a unit, the present invention comprises means for driving the backstand in relation to the winder or slitter-winder speed control drum. The relationship of a means for driving the backstand and the winder speed control drum is apparently essential inasmuch as the speed control drum of the winder machine determines the rate at which the web is rewound into new rolls. The web material must be wound or payed out from the parent or supply roll at the rate of demand set by the winder speed control drum.

A more specific object is to provide a payout drum on the backstand over which the supply web is drawn and to provide a belt drive from the winder speed control drum utilizing cone drive pulleys whereby there is incorporated in the apparatus means to establish a relationship between the rates of wind-up and the rate of payout, which difference of rates is caused by the stretching and smoothing out that occurs over the entire unwound portion of the supply web.

A further object of the present invention is to provide in a driven backstand payout drum means to maintain a constant nip pressure between the parent of supply roll so that the parent roll can be rotated without slippage at an exact demand rate determined by the surface speed of the driven backstand drum. In this regard, the linear contact pressure, or nip pressure between the backstand drum and the parent or supply roll prevents any tendency the material may have to wrinkle while unwinding, and the backstand drum is of

a character to provide a liberal over-wrap on the surface thereof which effects a smoothing out of the supply web and accordingly prevents creases from forming therein.

An additional object of the present invention is to provide in a backstand means whereby reverse winding on a rewinding machine is permitted and yet the backstand payout drum rotates in a single direction regardless of direction of winding on the rewinder to permit the operator to determine which surface of a supply web will comprise the outer surface on new rewound rolls.

A further object of the present invention, in conformance with that set forth above, is to provide means for maintaining a constant direction of rotation of a driven payout drum of a backstand by utilizing a reversing gear connected to the backstand drum and its cone pulley drive.

The present invention, it will be observed, accordingly eliminates the necessity for friction brakes which have been commonly used to retard supply or parent roll payout, thus eliminating malfunctions which might occur due to incorrectly adjusted brake shoes, as well as eliminating frequent renewal of brake linings, cooling of the brakes to dissipate heat, etc.

A further object of the present invention is to provide an extremely simple differential draw control which constantly corrects the tendency of the tension to occur in a supply web to accordingly afford regular payout of the parent or supply roll by maintaining a delicate balance between the tension, the retarding force due to an applied load between the parent or supply roll and a payout drum, and the amount of driving effort supplied to the parent or supply roll.

Another object of the precent invention is to provide an extremely simple differential draw control which lends itself to being controlled at a remote control console.

A further object of the present invention is to provide a relatively simple differential draw control which lends itself to being readily understood by an operator of the apparatus, permitting him to quickly acquire the skills necessary to process web materials of different consistencies and caliper thicknesses.

Another object of the present invention in conformance with that set forth above is to provide a readily adjustable nip pressure at the outer surface of a parent or supply roll by means of a driven payout drum, and provides means whereby a pressure regulator at a control console will readily indicate to an operator controlling the backstand the amount of pressure being applied and further provides means whereby the nip pressure can be readily adjusted and changed.

Another object of the present invention is to provide a controllable nip pressure at a supply roll whereby the nip pressure may be readily changed for different materials of different caliper thicknesses and surface smoothness, and to some extent, adjustments may be made in relation to the unevenness, irregularities and/or internal tension which may occur in the parent or supply roll being initially wound.

The differential rate of payout and rate of wind-up will depend in part upon the consistency of the material, its proneness to stretching, and its resistance to tearing, due to the tension of draw. The greater the resistance is, the larger will be the share of driving effort supplied by the web itself to cause the parent or supply roll to rotate. This load-sharing feature is particularly useful during acceleration and deceleration since a belt drive supplies both the additional torque required during speed up of the parent roll as well as the gradual increasing of the retarding force during leveling off of speed and stopping of the parent or supply roll.

A still further object of the present invention is to provide a drive for a backstand or unwind stand which facilitates initial threading of a supply web over various carrier rolls prior to starting the wind-up operation, this drive being particularly useful when handling relatively fine or thin materials such as tissue paper or the like, and accordingly permits a parent or supply roll to be rotated relatively slowly to pay out the web as required and subsequently after the supply web has been threaded and wrapped on a winder core shaft, the differential draw control may be readily adjusted to draw the web to its desired tension suitable for winding, slitting, etc.

And a still further object of the present invention is to provide in an unwinding stand or backstand means for continuously oscillating or shuffling the supply web transversely of its direction of payout to accordingly promote easier payout and in order to equalize internal tension and further afford an interweaving action of relatively thick and thin bands in a supply web to prevent corrugation of the rewound roll.

These, together with other specific objects, and the nature and advantages of the instant invention will become apparent from the following description taken in conjunction with the accompanying drawings forming a part thereof, wherein:

FIG. 1 is a top plan view of the unwind stand or backstand, showing a parent or supply roll disposed thereon;

FIG. 2 is a side elevation of the unwind stand or backstand showing the supply web in phantom lines;

FIG. 3 is an enlarged side elevation showing a portion of FIG. 2 in greater detail;

FIG. 4 is a fragmentary vertical section taken substantially on the plane of line 4—4 of FIG. 3;

FIG. 5 is a fragmentary top plan view, on a reduced scale, showing the pulley drive of the unwind stand or backstand in relation to the cooperating portions of winder apparatus with which the unwind or backstand is used;

FIG. 6 is a side elevation of the belt drive of the apparatus taken essentially on the plane of lines 6—6 of FIG. 5;

FIG. 7 is a fragmentary end elevation looking essentially from left to right at FIGS. 1 and 2 showing a modified backstand and showing mechanical means for oscillating or shuffling the supply web being payed out;

FIG. 8 is a horizontal section taken substantially on the plane of line 8—8 of FIG. 7; and

FIG. 9 is an enlarged, fragmentary vertical section taken substantially on the plane of line 9—9 of FIG. 8, and showing in detail the roller supports for the modified backstand frame.

Referring to the drawings in detail, and first considering FIGS. 1 and 2, a backstand is indictaed generally at **10** and may be described as a single drum, reel type, surface unwind stand.

The backstand **10** comprises vertical side frame members **12** and **14** secured together in any suitable manner, these details not being shown. Journalled on the side frame members **12** and **14** by means of suitable bearings **16** and **18**, respectively, is the shaft **20** of a payout or driving drum means **22**. The payout drum will have a surface of a suitable character and will be power driven in a manner to subsequently be described in detail.

The support frames **12** and **14** each include on the upper edge thereof mutually parallel tracks **24** and **26**, respectively, which comprise pairs of inwardly opening channels **28** and **30** (see FIG. 4). The tracks reciprocably support saddle carriage means comprising carriages **32** and **34**. Inasmuch as both of the carriages are identical, only carriage **34** will be described in detail. The carriage **34** includes a base **36** having a depending portion **38** which has extending transversely therethrough a pair of spaced parallel support shafts **40** which have journalled on opposite ends thereof wheel or roller elements **42** and **44** received in the channels **28** and **30**, respectively (see FIG. 1).

Base **36** includes upper opposed flange lip portions **46** and **48** which reciprocably or adjustably support an upwardly opening bearing or saddle element **50** which includes a lower portion flanged at **52** and **54** (see FIG. 3) respectively, received and retained by the flange lip portions **46** and **48**. The saddle **50** (see FIG. 4) includes a depending portion **56** which is transversely threaded at **58**, receiving therethrough a transverse, externally threaded shaft **60** journalled at opposite ends in the base **36**. The shaft **60** includes on the end **62** thereof a manually engageable handle **64**. The saddles **50** may be adjusted transversely of the rails or the upper edges of the frames **12** and **14**. This particular function permits the supply roll or parent roll to be properly oriented with respect to the payout drum or roll **22**. Only the front saddles **32** and **34** are adjustable, the support for the drum or roll **22** being free to slide toward the saddles **32** and **34**.

Indicated generally at **66** is a parent roll or drum of web material which is to be rewound. As is known to those skilled in the art, one surface or the other of the supply roll may have a finish different from the other, and thus the unwind or backstand must have sufficient versatility to permit unwinding of the parent or supply roll and subsequent rewinding with either the inner or outer surface exposed, depending upon the condition of the material.

The parent roll **66** includes a plurality of convolutions **68** wound on a suitable core **70** having a central shaft **72** received in the upwardly opening saddle elements or bearings **50**.

Extending longitudinally of the vertical support frames **12** and **14** are suitably mounted fluid motor means comprising fluid motors **74** and **76**, respectively, which are independently adjustable or controlled from a remote console by the operator of the apparatus. Only one of the fluid motors will be described in detail. However, the fluid motors **74** and **76** may be pneumatic or hydraulically operated, and each includes a force transmitting piston rod or shaft **78** which pivotally is connected at **80** to a suitably apertured portion of the depending portion **38** of the base **36** of the carriages **32** or **34**.

As the payout drum **22** is rotated in a clockwise direction, as indicated by the direction arrow in FIG. 2, peripheral or nip engagement of the drum **22** with the parent roll or supply roll **66** will cause the web material thereon to be frictionally payed out. The remote console (not shown) will include means for operating the fluid motors **74** and **76** and will include thereon directional valves, pressure regulators, pressure gauges, etc. and thus, depending upon the caliper of the web material, internal tension caused during winding, etc. can be controlled, as mentioned in detail with respect to the objects of the invention. The nip pressure or point of tangential engagement between the driving or payout drum **22** and the supply roll **66** may be so controlled as to maintain the desired tension in the supply web W which will be received at the rewinding or winding apparatus (not shown), with which the backstand will be used; this permits control of the tension applied to the web. The positive control at the nip pressure will permit an operator of the apparatus to compensate for the irregular or oval shape of the supply parent rolls and substantially eliminate tugging and jerking of the web W as it is being payed out. Further, a tremendous variation may occur in the different types of web material that are being rewound on the present apparatus; for example, the apparatus may be used to rewind toilet tissue, newsprint, bond letterhead papers, etc. Through the use of controlled nip pressure, the backstand has infinite versatility with respect to different materials that are to be payed out therefrom and if the web is particularly strong, less effort need be applied to the payout drum since the parent roll can be partially rotated by free web tension.

Mounted on the support stand frame members **12** and **14**, indicated generally at **82**, is a single carrier roll comprising a cylindrical roll member or element **84** extending transversely of the path of movement of the web W and including a longitudinal shaft **86**, one end **88** thereof being journalled in a bearing **90**. The bearing **90** is supported on a shaft **92** (see FIG. 1) which is rotatably supported in a bearing **94** at the end of the frame member **12**. The opposite end **96** of the shaft **86** is journalled in a bearing **98** connected to an externally threaded shaft **100** (see FIG. 2) including a handle **102** fixed to the upper end. The shaft **100** is threadedly engaged in an internally threaded sleeve **104** fixed to the end of the vertical frame member **14**.

Rotation of the handle **102** causes raising or lowering of the shaft end **96** to accordingly adjust for a slack in the web W.

Referring to FIGS. 5 and 6, indicated generally at **106**, is a belt drive assembly for the backstand **10** which is shown fragmentarily in FIG. 5. A two-drum winder is indicated diagrammatically at **108** and includes, in addition to other cooperating structure (not shown), a motor **110** having a drive shaft **112** connected to a reduction gearing assembly or transmisison **114** connected to a power shaft **116**. The power shaft **116** which is connected to a shaft **120** of a speed control drum **122** of the winder **108** has fixed thereto a tapered or cone pulley **118**. The drum **120** of the winder is placed parallel to a second drum or roller **122** with their surfaces spaced approximately 1 inch apart. Supported on these drums and frictionally driven thereby, is a core **124** upon which a rewound roll is formed.

The belt drive assembly **106** includes adjacent the backstand **10** and laterally thereof a suitable support **125** upon which is mounted a pair of bearings **126** and **128** rotatably supporting a shaft **130** parallel to the shaft **116** and having fixed thereon a tapered or cone pulley **132**. The pulley **132** is in substantial coplanar relation to the pulley **118**; however, the taper thereof is reversed with respect to the pulley **118**, and thus these pulleys may be described as being reversed, tapered pulleys.

Inasmuch as the speed of the control drum **120** determines the rate at which the web W is wound into new rolls, the supply of web material must be unwound or payed out from the supply roll **66** at the rate of demand set by the winder drum **120**.

This is achieved through the utilization of the belt driven payout drum **22** on the backstand over which the supply web is drawn and the cone or tapered drive pulleys establish a relationship between the rate of wind up and the rate of payout, the difference of rates being caused by the stretching and smoothing out that occurs over the entire unwound portion of the web W.

By maintaining contact between the payout or driven backstand drum **22** and the supply or parent roll **66** through the utilization of the fluid motors **74** and **76**, the exact amount of loading at the nip or point of engagement therebetween results in the supply roll being rotated without slippage and at the exact demand rate determined by the surface speed of the driven unwind drum or payout drum **22**.

The linear or line contact at the nip betwen the payout drum **22** and the parent roll **66** prevents any tendency the material may have to wrinkle while unwinding, and the liberal overwrap on the surface of the payout drum **22** provides a smoothing out effect and prevents creases from starting.

The transmission **114** is reversible and accordingly the drum **120** may be rotated either clockwise or counterclockwise to accordingly impart on the core **124** different directions of rotation. The reason for this reversibility is to afford the winding of either the inner or outer surface of the web W onto the core **124**. This versatile and reversible feature is necessary inasmuch as certain web materials have different finishes on one side as compared with the other. However, the payout drum **22** will be rotated in a clockwise direction, i.e. that indicated by the direction arrow in FIG. 2, for example.

In order to attain a constant direction of rotation of the payout drum **22**, interposed between the shaft **130**, upon which the cone pulley **132** is mounted and the shaft **20** of the payoutd rum **22**, is a transmission **134** which will have reversing gears therein (not shown) which reversing gears will be engaged or disengaged depending upon the direction of rotation of the driven roll or drum **120** of the winder **108**.

Indicated generally at **136** is a power operated belt shifter comprising a pair of vertically extending roller elements **138** and **140** supported on a suitable carriage **142** and engageable with the outer edges of a drive belt **144** entrained over the pulleys **118** and **132**. The carriage **142** is connected to a shaft **146** threaded into a suitable transmission **148**, the transmission **148** being driven by a motor **150**.

In order to shift the belt axially of the pulleys **118** and **132** to attain different driving ratios, the rollers **138** and **140** are moved parallel to the axis of rotation of the pulleys to accordingly shift the belt.

Briefly referring to the reversibility feature once more, the web W will pass vertically between the rolls **120** and **122**. Assuming the roll or drum **120** is rotating clockwise as indicated by the solid direction arrow thereon, the roll **122** will likewise rotate clockwise. Further, the core **124** will rotate counterclockwise; thus the inner surface of the supply roll **66** will remain the inner surface on the rewound roll formed on the core **124**.

However, if the roll **120** is reversed as indicated by the dotted direction arrow, this causes reverse rotation of the roll **122** and core **124** (see dotted direction arrows), and thus the roll being rewound on core **124** will have the inner surface as unwound from supply roll **66** exposed as the outer surface on rewound roll **124**.

Referring to FIGS. 7–9, all of the components described in detail with respect to the backstand **10** are provided on the backstand **210** and thus only the lower portion of the modified backstand **210** is disclosed in detail. The modified backstand **210** includes vertical support members **212** and **214** to which are secured a plurality of transverse plates **216**, **218**, **220**, **222**, **224** and **226**, respectively connected and integrated by rods **228**, **230** and **232**. The plates **216–226** have secured by means of machine screws **234** or the like a bearing element **236** received on a roller **238** including a lateral shaft **240** carried on a support plate **242** integral with a base or support plate **244**.

The frame member **214** includes at one side thereof a mounting or draft element **246** pivotally connected at **248** to an oscillating shaft **250** driven by a transmission **252**. The transmission **252** includes power input shaft **254** having a pulley **256** mounted thereon and driven by a belt **258** which is entrained over a drive pulley **260** mounted on a shaft **262** of a suitable motor **264**.

Rotation of the shaft **254** causes reciprocation of the shaft or connecting element **250** and a predetermined period of oscillation is caused whereby the entire backstand frame is oscillated or shuffled with respect to a drum by means of which a roll is being rewound. This oscillation or reshuffling the web laterally with respect to a drum upon which a web is being rewound promotes easier payout of the web, distributes internal tensions in the web and causes an interweaving action of relatively thick and thin bands in a mass produced web to prevent corrugation of the rewound or new roll.

Briefly in review, the supply or parent roll **66** is disposed on the saddles **50**. Through the adjustment of the handle **64**, the saddles **50** are adjusted transversely to properly orient the supply or parent roll with respect to the payout drum **22**. Excessive slack can be taken up by means of the carrier roll **84** and the nip pressure or back pressure between the supply roll and the payout

drum 22 may be readily adjusted by means of operating the fluid motors 74 and 76.

Reverse winding is permitted for the use of the disclosed backstand inasmuch as a reversible transmission 134 is provided wherein the payout drum 22 always rotates in a clockwise or constant direction.

Through the use of the belt drive assembly 106, relatively thin caliper materials, such as tissue paper or the like, may be readily threaded from the backstand onto rewinding apparatus. The exact amount of drag or back pressure imposed by means of the fluid motor means 74 and 76 results in control without slippage between the payout drum 22 and the supply or parent roll 66. Further, linear or nip contact with controlled pressure between the payout drum and the parent roll prevents the material from wrinkling while unwinding and tends to smooth out the web being payed out.

Inasmuch as the backstand provides an extremely simple differential draw control, which constantly compensates for tension in the web to cause the regular payout from the parent roll, a delicate balance between the tension and the retarding force, due to applied load between the parent roll and the payout drum, can be supplied by the drive belt assembly 106. The differential speed relationship between web payout rate and wind-up rate is directly indicated and adjustable at a remote console. The present design eliminates the need for friction brakes, constant tension devices and spring loaded tension relieving rolls, and further there are no malfunctions due to disadjusted brake shoes, and there will be no necessity for renewing brake linings or using cooling means for dissipating heat in positively acting brakes.

A relatively simple design of the backstand will permit an operator to quickly acquire the skills necessary to process web material of different consistencies and caliper thicknesses. Further, by the adjustment of the nip pressure between the outer surfaces of the parent roll and the payout drum at a control console, a suitable calibrated pressure gauge will clearly indicate to the operator the nip pressure being applied and he will readily be able to ascertain a range of nip pressures generally applicable to particular web materials. The amount of nip pressure that will be applied in order to obtain an even payout will depend largely upon the caliper thickness and surface smoothness of the material and, to some extent, on how even the parent roll was initially wound and the amount of internal tension in the parent or supply roll. Further, the proneness of the material to stretch and its resistance to tearing, due to tension when drawn from the parent roll will, in a sense, determine the difference in the rate of payout and the rate of wind-up at the rewinding apparatus. The greater the resistance is, the larger a driving effort can be supplied by the web itself to cause the parent or supply roll to rotate, i.e. a greater tension can be applied to a relatively tough web as compared with one that is relatively weak in tension.

The load sharing feature is particularly useful during acceleration and deceleration since the belt drive supplies both the additional torque required during speed up and the gradual increasing retarding force during leveling off and stopping of the parent roll. It is readily apparent that when operating with a relatively large and heavy parent roll, a considerable amount of inertia force exists once rotation of the parent roll is initiated.

Further, the belt drive provides a ready means to facilitate initial threading of the web over various carrier rolls of the rewinding apparatus prior to starting a wind-up cycle. This is particularly useful when handling a very fine material such as tissue paper since the parent roll can be rotated very slowly, manually or by using the driving motor, to payout the web as required. After the web has been threaded and wrapped on a winder core shaft, the differential draw control is adjusted to draw the web to the desired tightness suitable for winding.

Additionally, web materials of irregular caliper thickness can be very successfully rewound by oscillating the backstand and thus in a sense shuffling the convolutions of the newly formed roll. This action promotes easier payout and better distribution of internal tension in the newly formed roll by causing an interweaving action of relatively thick and thin bands and will prevent corrugation of the new roll.

It will be obvious to those skilled in the art that various changes may be made without departing from the scope of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification but only as indicated in the appended claims.

What is claimed is:

1. In an unwind stand for paying out a supply web, payout drum means supported on a horizontal axis of rotation, carriage saddle means including a supply roll support defining an axis of rotation substantially parallel to that of said payout drum means, said carriage-saddle means being mounted for movement toward and away from said payout drum means, fluid pressure-controlled, force-transmitting means connected to said saddle carriage means for urging said carriage-saddle means toward said payout drum means for obtaining a controlled nip pressure between said payout drum and a supply roll, a belt drive operatively connected to said driving drum for rotating the same, and reversing gear means interposed between said belt drive and said payout drum means for rotating said driving drum means in the same direction for alternate directions of movement of said belt drive.

2. The structure of claim 1, in which said unwind stand includes a support frame including spaced, parallel track elements, said carriage-saddle means comprising a pair of carriages displaceably supported on said track elements.

3. The structure of claim 1, including a web-carrier roll supported on an axis of rotation substantially parallel to the axis of rotation of said payout drum means and down stream thereof, and vertical adjusting means connected to said web-carrier roll for controlling the tension of the supply web being payed out.

4. The structure of claim 1, in which said belt drive includes reversed, cone pulleys, a driving belt entrained over said cone pulleys, one of said cone pulleys being operatively connected to said payout drum means through said reversing gear means, and a power-driven shaft connected to said other cone pulley.

5. The structure of claim 1 including mechanical belt shifting means operatively connected to said belt drive.

6. In an unwind stand for paying out a supply web, payout drum means supported on a horizontal axis of rotation, carriage saddle means including a supply roll support defining an axis of rotation substantially parallel to that of said payout drum means, said carriage-saddle means being mounted for movement toward and away from said payout drum means, fluid pressure-controlled, force-transmitting means connected to said saddle carriage means for urging said carriage-saddle means toward said payout drum means for obtaining a controlled nip pressure between said payout drum and a supply roll, said unwind stand comprising a displaceably mounted support frame upon which said payout drum, carriage saddle and force transmitting means are mounted, and power means connected to said support frame for oscillating said frame periodically and transversely of the plane at which a supply web is payed out.

7. The structure of claim 6 in which said support frame includes support rollers journalled on the lower end thereof and on axes of rotation normal to that of said driving-driven means, and said power means comprising auxiliary motor means for oscillating said frame and shuffling said supply web.

8. The structure of claim 2 in which fluid pressure

means comprises a pair of independently operable fluid motors independently controlling said carriages and independently urging the carriages toward said payout drum means for controlling nip pressure at opposite ends of a supply roll of web material.

9. In an unwind stand for paying out a supply web, payout drum means supported on a horizontal axis of rotation, carriage saddle means including a supply roll support defining an axis of rotation substantially parallel to that of said payout drum means, said carriage saddle means being mounted for movement toward and away from said payout drum means, fluid pressure-controlled, force-transmitting means connected to said saddle carriage means for urging said carriage-saddle means toward said payout drum means for obtaining a controlled nip pressure between said payout drum and a supply roll,

said unwind stand including a support frame including spaced, parallel track elements, said carriage-saddle means comprising a pair of carriages displaceably supported on said track elements, and manual adjusting means connected between said carriages and said track elements for transversely orienting a supply roll on said carriages with respect to the direction a web is payed out.

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