PORTABLE JOINT WRAPPER FOR PIPELINES

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ABSTRACT OF THE DISCLOSURE

The joint wrapper is portable and adapted to wrap a strip of wrapping material about a bare field welded joint area of two mill coated pipe sections. The pressure roller is bowed to be able to compensate for the difference in size between the bare joint and adjacent mill coated sections. The bowed pressure roller is adjustable by turning with respect to the joint area to vary the degree of pressure placed on the wrapping material. The felt wick wipes the pressure roller of excess tar while the rip wire is used to cut off the necessary length of wrapping material.

This invention relates to a portable joint wrapper for pipelines. More particularly, this invention relates to a portable joint wrapper for wrapping welded joints between pipe sections. It has usually been the practice to weld pipe sections together in the field when laying a pipeline such as a gas pipeline, water pipeline, etc. especially where large distances and/or sealed joint connections are involved. However, as the pipe sections are usually supplied with a coating or wrapping of a protective material to guard against corrosion and other detrimental effects, the ends of the pipe sections have frequently been stripped of protective material so as to enable a clean efficient weld to be made without encumbrance. Accordingly, once a weld has been made, it has been necessary to cover the exposed joint formed by the welded together ends of the pipe sections before placement. To this end, it frequently has been the practice to have two men manually apply a tape of protective material such as a coal-tar type about the exposed joint. In some instances, one holds a roll of the tape and pays it out onto the joint while the other heats the adhesive portion of the tape, for example, with a blowtorch, and pats the tape into the joint. In other instances, one person applies a hot coating such as a coal-type enamel from a roofing kettle to the joint while another wraps a tape over the hot coating. However, these heretofore methods have been disadvantageous for many reasons. In either of the above instances, since the operation of wrapping the pipe joints have relied on manual methods, insufficient pressures have been developed to completely bond the tapes of protective material to the pipe joint. For example, in the first instances, pockets have formed between the tape and joint due to a lack of sufficient pressure in manually patting the tape onto the pipe joint, especially when the tape is in a heated state. Also, since the tapes have been wrapped from the mill coated pipe sections across the bare joint, gaps have existed under the tapes in the areas adjacent the mill coating on the pipe sections as insufficient pressure has been brought to bear in these areas.

Accordingly, it is an object of the invention to apply a protective material about a pipe joint under a pressure sufficient to eliminate pockets.

It is another object of the invention to wrap a pipe joint in field.

It is another object of the invention to provide a joint wrapper for wrapping pipe joints which is portable.

It is another object of the invention to provide a joint wrapper which is adjustable to different pipe sizes.

It is another object of the invention to prevent an accumulation of tar on the pressure applying means of a joint wrapper.

It is another object of the invention to utilize an amount of wrapping material sufficient to wrap a pipe joint once.

Briefly, the invention provides a pipe joint wrapper which is portable and capable of use in the field. The joint wrapper is constructed so as to be placed over a pipe in concentric relation with the pipe and rolled along the pipe from pipe joint to pipe joint. In addition, the joint wrapper is constructed so as to be rotated about a pipe joint in order to pay out a strip of protective material about the pipe joint. A supply roll of protective material is mounted in the joint wrapper and the protective material is payed out from the supply roll in a guided manner through the joint wrapper and supplied to an exposed pipe joint under a pressure applying means.

The pressure applying means consists of a bowed roller of integral or composite structure which is adjustable mounted in the joint wrapper such that the degree of bowing can be regulated with respect to a pipe joint in order to effect different degrees of pressure against the pipe joint. In addition, a felt wick is disposed in pressure contact with the pressure applying means in order to wipe any tar from the pressure applying means thereby assuring relatively clean surfaces. Also, a rip wire is secured in the joint wrapper to lie under the protective material so as to serve the necessary length of material from the supply before a pipe joint has been completely wrapped.

In use, the joint wrapper is mounted on a pipeline and rolled over an exposed pipe joint. After the pressure applying means has been set to the desired degree of bowing relative to the pipe joint heat is applied to the strip of protective material payed out from the supply roll. The protective material is of known construction and includes a layer of tar on one side for bonding the protective material to a pipe joint. Heat is applied to the tar coated side of the protective material by means of a torch which is held by one person while another standing on the opposite side of the pipe rotates the joint wrapper.

As the leading edge of the protective material strip is applied against the pipe joint, the heated begins to harden and thereby immediately bonds the strip to the pipe joint so as to anchor the strip and permit paying out of the remainder of the strip upon continued rotation of the joint wrapper. The joint wrapper is thereafter rotated while the strip of protective material is payed out and pressed against the pipe joint by the pressure applying means. When a length of protective material is payed out past the rip wire sufficient to cover the pipe joint, the rip wire is manually grasped at one end and pulled across the protective material strip to cut off the desired length. The tar coated side of the protective material strip is continuously heated during rotation of the joint wrapper about the pipe joint until a point before the end of several strips is reached. At this point heat is removed and the residual heat in the tar of the adjacent portion of the strip is permitted to effect bonding of the end of the strip to the pipe joint. The joint wrapper is then rolled along the pipe to the next pipe joint.

These and other objects and advantages of the invention will become more apparent from the following detailed description and appended claims taken in conjunction with the accompanying drawings in which:

FIG. 1 illustrates a perspective view of a pipe joint wrapper of the invention in a position removed from a pipe joint to be wrapped;
FIG. 2 illustrates a perspective view of the pipe joint wrapper over the pipe joint to be wrapped; FIG. 3 illustrates a partially cut-away view of a composite pressure roller according to the invention in a wrapper applying position; FIG. 4 illustrates a view similar to FIG. 2 of the pipe joint wrapper over a pipe joint prior to wrapping; FIG. 5 illustrates a view similar to FIG. 4 of the joint wrapper during wrapping; FIG. 6 illustrates a view similar to FIG. 5 of the joint wrapper during wrapping; FIG. 7 illustrates an enlarged view of the composite pressure roller in pressure applying relation to a pipe joint and the felt wick in wiping relation to the composite pressure roller; and FIG. 8 illustrates a perspective view of the rip wire according to the invention during severance of a strip of wrapping material.

Referring to FIGS. 1 and 4, the joint wrapper 9 is constructed with a frame 10 having a pair of turning handles 11 of interrupted annular shape. The handles 11 are disposed in alignment with each other so as to permit the joint wrapper 9 to be mounted on a pipe 12. A U-shaped plate 13 is secured, as by bolts, to each turning handle 11 within the dimensioned confines of the turning handles. In addition, a plurality of cross bars 14 are secured and spaced apart from one another to impart rigidity to the frame 10 of the joint wrapper 9. In order to permit movement of the joint wrapper 9 along the pipe 12, a riding assembly 15 is mounted between the plates 13 of the frame 10. The riding assembly 15 includes two pairs of wheels 16, each pair of which is journaled on a shaft 17 mounted in an elongated bearing 18. The support 18 is articulated to a cross bar 19 by a link 20 and an elongated handle 21 so as to be moved relative to the cross bar 19 upon pivoting of the handle 21. A spring 22 is secured at one end to a plate 13 and at the opposite end to the support 18 in order to bias the support 18 in a direction towards the cross bar 19. The handle 21 (FIG. 4) is constructed of two flat members 23 which are pivotally mounted at intermediate points on the cross bar 19 and which are secured to opposite sides of the support 18. In addition, a suitable hand grip 24 is fixed to the upper ends of the members 23 to facilitate manual pivoting of the handle 21.

When the riding assembly 15 is in an extended position, as shown in FIG. 4, the weight of the entire joint wrapper 9 is supported by the wheels 16 riding on the pipe 12.

In order to permit rotation of the joint wrapper 9 about the pipe 12, a pair of wheels 25 are mounted in each plate 13 of the frame 10. The support 18 is extended to the plate 13 when the riding assembly 15 is retracted and to be spaced from the pipe 12 when the riding assembly is extended. The wheels 25 are mounted in the plates 13 by means of threaded hub shafts so as to be maintained in a fixed position. However, since the joint wrapper 9 is capable of use with pipes of different diameters, the wheels 25 can be mounted by means of adjustable pivot arms (not shown) on the plates 13 or a series of threaded bores can be formed in the plates 13 to receive the stub shaft of a wheel 25 so that the spacing between the wheels 25 can be changed.

Referring to FIG. 4, a support axle 26 is removably mounted in the frame 10 to support a roll of protective material 27, such as a material having a coating of tar on one side. The support axle 26 is mounted in the frame by being slid through an opening in one plate 13 and by being received in another opening in the opposite plate 13. A guide shoe 30 is secured to the plate 13 through which the axle 26 is slid to lock the axle 26 in place. The roll of protective material 27 which is of known construction is positioned on the axle 26 by passage of the axle 26 through the roll and is locked in position by a pair of lock bolt assemblies 64 (FIG. 3) disposed on opposite sides of the roll 27. The lock bolt assemblies allow an adjustment to be made to the width of protective material used. The protective material is led from the roll 27 past a guide bar 29 mounted in the plates 13 across the frame 10 and over a curved guide shoe 30 for delivery to a pipe joint in a uniform manner. In addition, a tension roller 31 is mounted in the frame 10 adjacent to the guide shoe 30 under a spring biased force to permit tension clamping of the unused portion of the protective material fed from the roll 27.

The guide shoe 30 and tension roller 31 are mounted on arms 32 which are pivotally mounted on the plates 13 as by bolts. The guide shoe 30 is secured at spaced points to a pair of tie bars 33, 34 which are each secured as by bolts to the arms 32. The tension roller 31 is journaled at each end to a link 35 which is fastened to an axle 36 secured between the arms 32. The arms 32 are sized to project across the opening defined by the ends of the turning handles 11 so that the joint wrapper 9 can completely encircle the pipe 12 during a wrapping operation.

Referring to FIGS. 3 and 4, a pressure applying means in the form of a composite roller 37 is also mounted on the arms 32 across the frame 10 for pressing of the strip of protective material against a pipe joint. The composite roller 37 is constructed of a plurality of individual rollers 38 which are independently rotatably mounted on a bowshaped shaft 39 and biased together under a slight force by a pressure spring 40 at one end of the shaft 39. One end of the bowshaped shaft 39 is secured within a suitable locking assembly 41 by means of a locking bolt 42 while the locking assembly 41 is secured to a handle 43 by bolts 44. The bolt 44 closest to the center of the handle 43 passes through an elongated slot in the handle 43 so that slight sideways movement of the handle is permitted for purposes as set forth below. The handle 43 cooperates with a slotted lock plate 45 secured in the arm 32 adjacent the handle to adjust the relative position of the bowshaped shaft 39 relative to the pipe. That is, the handle 43 is sized to be received in one of a series of slots of the lock plate 45 in a removable manner such that as the handle 43 is moved from one slot to another, the bowshaped shaft 39 is rotated. The rollers 38 of the composite roller 37 are sized to press a strip of protective material against a pipe joint under a pressure pattern which is bowed, the greatest pressure occurring at the center of the bar.

Referring to FIGS. 2 and 7, in order to lock the arms 32 in position across the handle ends, each arm 32 is provided with a stud 46 at its free end which is sized to be received in one of a series of notches of a notched bar 47 pivotally mounted in the plate 13 on the opposite side of the opening formed by the turning handles 11 from the frame 10.

Referring to FIGS. 1 and 8, arms 32 are each provided with a lever 48 at an intermediate point. Each lever 48 is in turn pivotally mounted at one end to a plate 13 and secured at the opposite end to a spring 49. In addition, a suitable handle 50 is fixed to the lever 48 to facilitate manual pivoting of the lever 48 against the force of the spring 49 in order to permit removal of the stud 46 from the notched bar 47 or to permit movement of the stud 46 from one notch to another notch in the series of the bar 47. The spring 49 is also secured to an arm 51 which is fixedly mounted as by a locking bolt 52 on a shaft 53 extending across the frame 10. The shaft 53 is journaled in the plates 13 and has a handle 54 secured thereon by a suitable locking mechanism 55 (FIG. 1). The handle 54 is sized to project from the shaft 53 across the cross bar 14' and under a lug 56 secured on the cross bar 14'. When disposed under the lug 56 the handle 54 is in a position causing locking of the arms 32 holding the composite roller 37 and pressure contact of the composite roller 37 against a pipe joint. When the handle is moved away from the lug 56 and cross bar 14', the composite roller 37 is moved out of contact with the pipe joint (FIG. 5) while the arms 32 remain in a held position by the notched bars 47.

Referring to FIGS. 5 and 7, awick 57, for example, of felt material is mounted on the inside of the guide shoe 30.
in contact with the rollers 38 of the composite roller 37 in order to wipe tar from the rollers 38. The wick 57 is secured to a bowed plate 58, for example, of aluminum, to accommodate the working condition of the composite roller 37. In order to secure the plate 58 on the guide shoe 30, the plate 58 is provided with an elongated slot at one end for receiving a stud secured to the guide shoe 30 and an aperture at the opposite end for receiving a screw passing through the guide shoe 30. The wick 57 is supplied with oil as a lubricating oil to facilitate removal of tar from the rollers 28 and rolling of the rollers 28 on the wick 57.

Referring to FIG. 8, a rip wire 59 is mounted on the guide shoe 30 to extend under the protective material strip. The rip wire 59 is made, for example, of piano wire and is secured at one end to the guide shoe 30 while being releasably held between a pair of upstanding fingers 60 formed from the guide shoe 30 at the opposite end. In order to facilitate grasping of the free end of the rip wire 59, a ring 61 is secured to the end of the rip wire 59. The rip wire 59 is used to sever the length of material from the strip of protective material sufficient for covering a pipe joint.

In operation, in order to mount the wrapper 9 onto the pipe 12, the handle 54 35 is swung away from the lug 56 so that the notched bars 47 on the other side of the frame 10 are dropped into a lowermost position (e.g. as shown in FIG. 4). The arms 32 which are received in the notched bars 47 are then lifted from the notched bars 47 and allowed to swing free into a dependent position (e.g. as shown in dotted lines in FIG. 4). The joint wrapper 9 is then lifted and placed over the pipe 12. In this position, the handle 21 of the riding assembly 15 is placed in a raised or extended position such that the entire weight of the joint wrapper 9 is transferred through the wheels 16 to the pipe 12. The arms 32 are then re-mounted in the lowermost notches of the respective notched bars 47 so that the composite roller 37 is maintained in contact with the pipe 12. The joint wrapper 9 is thus in position to be rolled along the pipe 12 to a pipe joint J (FIG. 1) formed by the bare ends of two welded pipe sections. In order to effect movement of the joint wrapper 9 along the pipe 12, the turning handles 11 is grasped and the wrapper 9 pulled in the direction of intended travel.

In order to wrap a pipe joint J with a strip of protective material, the wrapper 9 is moved over the pipe joint J. In this position, the composite roller 37 is in a position of concave relation to the pipe joint J (cf., FIG. 1). The riding assembly 15 is then retracted relative to the frame 10 by lowering the handle 21 (FIG. 3) so that the wheels 25 on the plates 23 come into contact with the pipe 12 while the wheels 16 of the riding assembly 15 move away from the pipe 12 (FIG. 5). Next, the arms 32 are moved from the lowermost notches of the notched bars 47 to the notches which correspond to the pipe size so as to allow the composite roller 37 to be brought adjacent to the pipe joint J when the handle 54 is returned to the position under the lug 56. To this end it is noted that depending on the diameter of the pipe 12, the studs 46 of the arms 32 are placed within a higher or lower notch. For example, for smaller sized pipe, the studs 46 are placed in the highest notches; whereas, for larger sized pipes, the studs are placed in the lowest notches.

A supply roll 37 of protective material, such as a tape of plasticized coal tar enamel reinforced with fiber glass and backed with 15# pipeline felt and of sufficient width to cover the joint J and overlap the edges of the wrapped sections of the pipes, is then mounted on the axle 26. The tape of protective material is then unrolled from the roll 27, passed around the guide shoe 30, passed around the remainder of the guide shoe 30 and inserted between the composite roller 37 and pipe joint J to overlap the mill coatings of the pipe sections. Next, the handle 54 secured to the common shaft 53 is rotated back under the lug 56 so that the composite roller 37 is raised up into contact with the end of the protective material strip and pipe joint J. Then, the handle 43 secured to the bowed shaft 39 is turned and inserted into a desired slot of the lock plate 45 at a predetermined pressure setting with respect to the pipe joint J. That is, the bowed shaft 39 is turned so that the roller 37 becomes convex with respect to the pipe 12 with the centermost rollers 38 in pressure contact with the strip of protective material positioned over the pipe joint J (see FIG. 3).

Thereafter, referring to FIG. 6, a propane torch 62 or other suitable heat source is used to heat the inside surface of the strip of protective material to a molten consistency by directing a flame 63 along the width of the strip at a point where it is ready to pass under the composite pressure roller 37. As the tar is melted, the wrapper 9 is manually rotated at a rate to maintain a ripple of molten tar. Rotation of the wrapper continues until a length of protective material passes over the rip wire 59 on the guide shoe 30 sufficient to cover the pipe joint. The end of the rip wire 59 is then grasped and pulled across the protective material to sever the sufficient length of material for covering the pipe joint. Rotation of the wrapper 9 then continues along with heating of the protective material. As the end of the protective material strip approaches the pipe joint, the torch is removed so that the ripple of tar is allowed to bond the end to the pipe joint. This minimizes any overflow of tar from the coated pipe joint. The wrapper 9 is then rotated two or three times to further assure a good bond of the protective material to the pipe.

It is noted that as the joint wrapper 9 is rotated the rollers 38 press the protective material strip into pressure engagement with the pipe joint, the highest pressure occurring at the center area of the composite roller 37. Further, due to the bowing of the composite roller 37, the outer rollers 38 are allowed to press the strip into the joint J adjacent the edges of the mill coating on the pipe sections so as to ensure the bonding of the strip completely to the joint J without leaving a gap under the strip along the mill coating. Also, the outermost rollers 38 are rolled on the mill coating of the pipe sections without interfering with the protective material into the pipe joint J. Also, the outermost rollers 38 effect a pressure on the edges of the protective material strip to bond them to the mill coating on the pipe sections.

It is also noted that as the wrapper is rotated, the torch 62 is handled by one person on one side of the pipe for the application of the protective material to that side of the pipe and handed over to another person on the other side of the pipe to complete the wrapping of the pipe joint. After the pipe joint J has been wrapped, the handle 43 is released and rotated to relieve the pressure of the roller 37 on the pipe 12. The handle 54 is also released to permit the pressure roller 37 to drop away from the pipe 12 and the arms 32 are moved into the lowermost notches of the bars 47. The handle 21 of the riding assembly 15 is then lifted to raise the wrapper 9 into the wheels 16 and the wrapper 9 is pulled or pushed to the next pipe joint.

Although the joint wrapper of the invention has been described as being used for a range of pipe sizes, for example, a range of three pipe sizes such as 4-inch, 6-inch and 8-inch or a variable range of pipe sizes from 2 inches to 42 inches, the joint wrapper can be constructed for one pipe size only. For example, where a small size pipe is to be wrapped within a confined space, the joint wrapper can be constructed for that size pipe as so to keep the dimensions of the wrapper to a minimum. Also, although the shaft of the composite roller has been described as being bowed, it is springy enough to allow the pressure roller to ride over projections in the pipe during a wrapping operation.
During a wrapping operation should any tar become deposited on the pressure roller, the felt wick rubbing on the pressure roller will wipe the deposits from the roller so as to prevent any detrimental accumulation.

The invention thus provides a joint wrapper machine which allows a mechanical wrapping of a pipe joint in the field in a manner to ensure that sufficient pressure is brought to bear on the wrapping material to effect a good bond. The invention allows a pipe joint to be wrapped in a relatively short time. For example, for an 18-inch pipe, it takes from 3½ to 4 minutes to make two wraps of a pipe joint as opposed to about 6 minutes for three men using the heretofore known techniques. The invention also provides a joint wrapper which is of a weight so as to be portable and convenient to use in the field. The joint wrapper has a pressure roller which is adjustable so as to impose any desired pressure on the protective material being wrapped about a pipe joint such that any slight deviations in pipe size, protective material thickness, etc. can be easily accommodated. Further, the joint wrapper operates in a clean manner such that tar is prevented from accumulating on the pressure roller and interfering with the operations of the wrapper.

Further, by flattening the bowed shaft of the pressure roller relative to the pipe, the joint wrapper can be used to wrap an entire pipe instead of only a pipe joint.

Having thus described the invention, it is not intended that it be so limited as changes may be readily made therein without departing from the scope of the invention. Accordingly, it is intended that the foregoing Abstract of the Disclosure and the subject matter described above and shown in the drawings be interpreted as illustrative and not in a limiting sense.

What is claimed is:
1. A joint wrapper for wrapping pipe joints comprising:
   a frame for enveloping a pipe joint of a pipe;
   wheel means mounted on said frame for rotatably supporting said frame on the pipe for rotation about the pipe joint;
   a pressure applying roller adjustably mounted in said frame for pressing against the pipe, said roller being bowed with respect to the pipe to effect a greater pressure at the center thereof against the pipe joint;
   a pair of arms mounted at one end in said frame, said arms supporting said roller therebetween;
   locking means releasably secured to said arms at the opposite end for locking said arms in said frame;
   said locking means including a bar having a series of notches therein for receiving one of said arms therein, said bar being pivotally mounted in said frame, and means for locking said bar in position upon receiving said one arm therein.
2. A joint wrapper for wrapping pipe joints comprising:
   a frame for enveloping a pipe joint of a pipe;
   wheel means mounted on said frame for rotatably supporting said frame on the pipe for rotation about the pipe joint;
   a pressure applying roller adjustably mounted in said frame for pressing against the pipe, said roller being bowed with respect to the pipe to effect a greater pressure at the center thereof against the pipe joint;
   a riding assembly mounted in said frame having a plurality of wheels retractably mounted therein, whereby said wheels upon extension onto the pipe rollably supports said frame on the pipe with said wheel means held out of contact with the pipe.
3. A joint wrapper for wrapping pipe joints comprising:
   a frame for enveloping a pipe joint of a pipe;
   wheel means mounted on said frame for rotatably supporting said frame on the pipe for rotation about the pipe joint;
   a pressure applying roller adjustably mounted in said frame for pressing against the pipe, said roller being bowed with respect to the pipe to effect a greater pressure at the center thereof against the pipe joint;
   a guide shoe in said frame for guiding a length of the protective material to and between said roller and the pipe joint; and
   a wire disposed on said guide shoe adjacent said roller for wiping said roller.
4. A joint wrapper as set forth in claim 3 wherein said wick is bowed to resiliently press against said roller.
5. A joint wrapper for wrapping pipe joint comprising:
   a frame for enveloping a pipe joint of a pipe;
   wheel means mounted on said frame for rotatably supporting said frame on the pipe for rotation about the pipe joint;
   a composite roller adjustably mounted in said frame for movement relative to the pipe, said roller including a bowed shaft and a plurality of rollers rotatably mounted on said bowed shaft; and
   means for rotating said bowed shaft in said frame to vary the distance between the centermost rollers of said plurality of rollers and the pipe to effect a greater or less pressure of said composite roller on the pipe.
6. A joint wrapper as set forth in claim 5 wherein said frame includes a pair of arcuate turning handles.
7. A joint wrapper as set forth in claim 6 wherein said wheels are adjustably mounted in said frame to adjust to different pipe sizes.
8. A joint wrapper as set forth in claim 5 wherein said frame includes a handle secured to one end of said bowed shaft and a slotted lock plate secured to said frame having a plurality of arcutely spaced slots for selectively receiving said handle therein.
9. A joint wrapper as set forth in claim 8 wherein said composite roller includes a spring about said bowed shaft biasing said plurality of rollers together.
10. A joint wrapper as set forth in claim 5 further comprising a pair of arms pivotally mounted at one end in said frame and supporting said bowed shaft therebetween, a pair of notched bars having a series of notches therein pivotally mounted at one end in said frame, said arms being releasably received in one of the notches of said bars for holding said composite roller adjacent the pipe joint, and means for pivoting each said notched bar to move said composite roller into contact with the pipe joint.
11. A joint wrapper as set forth in claim 10 wherein said means for pivoting is connected to said pair of notched bars to pivot said notched bars simultaneously.
12. A joint wrapper as set forth in claim 10 wherein said means includes a shaft rotatably mounted in said frame; a pair of arms mounted on said shaft; a spring secured to each of said pair of arms; a lever pivotally mounted at one end in said frame and pivotally connected to each said notched bar at said one end of each notched bar, said lever being connected at the opposite end to said spring; and a handle secured to said shaft for rotating said shaft whereby rotation of said shaft in one direction causes movement of said notched bars and said arms outwardly of said frame to move said roller away from the pipe and rotation of said shaft in the opposite direction causes movement of said notched bars and said arms inwardly of said frame to move said roller toward the pipe.
13. A joint wrapper as set forth in claim 12 wherein said means for rotating said bowed shaft includes a lock plate having a series of arcutely spaced slots secured in said frame and a handle fixed on said bowed shaft and releasably retained within one of the slots of said lock plate.
14. A joint wrapper as set forth in claim 5 comprising a riding assembly mounted in said frame having a plural-
ity of wheels retractably mounted therein whereby said wheels upon extension onto the pipe rollably support said frame on the pipe with said wheel means held out of contact with the pipe.

15. A joint wrapper as set forth in claim 14 wherein said riding assembly includes a common handle for retraction said plurality of wheels simultaneously.

16. A joint wrapper as set forth in claim 5 further comprising an axle in said frame for supporting a roll of protective material thereon, and a guide shoe in said frame for guiding a length of the protective material to and between said roller and the pipe joint.

17. A joint wrapper as set forth in claim 16 which further comprises a rip wire secured at one end to one edge of said guide shoe and disposed across said guide shoe under the protective material for severing a strip of protective material therefrom upon pulling of said rip wire across guide shoe.

18. A joint wrapper as set forth in claim 16 which further comprises a wick disposed on said guide shoe adjacent said roller for wiping said roller.

19. A joint wrapper as set forth in claim 18 wherein said wick is bowed to resiliently press against said roller.

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