No37.

## SCUTCHER OR LAP MACHINE

With heawy Iron frame; and 3 small Porquepine Cylinders; and Cage to follow; Thas also one Beater, with lage to fallow; This Mockine both opens and cleans the Cotton, arrat also matres it into a lapp; occupios a space of 23 F't 6 iuches long; by 7 Feet wide; has ariving pullies $12 \times 3 \frac{3}{2} \mathrm{in}$, shoula run Rev.



Foldout reduced to $67 \%$ to fit on page.

## N. 38 <br> IMPROVED LAP MACHINE

Withy one Beater 16 in diameter one?sett of Fieed Rollers and improved Cages. - MTactine 15Ft Zong 7Ftwide Driving putley 9 in diameter $3 \frac{5}{8}$ face and should man 1500 Revolutions per minute.



## N:39. <br> COTTON CLIPPEA CARD.

Solid Iron frameorsilles Arches Cased up with Iron, Main Glinder 40 Irlithes in Diameter. Doffer 20 Inches in Diameter: in Seginent Bloef 4 Wor Kers 6 Inches in diameter 4 Struppers 3 3/4 inches in diameter 2 Lúcketring awh 10 Inches in diameter; one Putent Stropper 10 In in Hiameder, Driviny from counter Shaft with Variable speeds; The Leckerins being mute all adinstatule ane the other; Flued feed Rollers, driven with a Diagonal shaft and Leviel Wheels, Zinc Grating, and Dirt box under Cylinder; Driving Pulleys
 mitutue belujues a space of $\mathcal{B}$ Feet 6 Inches long, by 5 Feet

30 in wide .............................

40. ......................................


No40

## CONE HEAD

Iron Firanie, with corie speed to Drive Patent Strimper on Clipper Card variable Splends; cused up, Drwing pmilleys 8 Tnches in diumeter, Shoud run 249 Revoll:
 wide.

## $\$$



No41.

## CLIPPER BAILWAY DRAWING head.

With one wet of forl"steel Roller" $77 / r$ inctaes in diameter, 12 inches long on the flutes with plunger; and kewolvong cane, 12 inhes in diameter and cased up to prevent druft or dust chectung in the wheels, occupies a space of 3. feet inctes long by 3Ft 6 in Wide driving Rutters 8 unches in deameter and should rum Rovolution per minute



## CLIPPER RAILWAY DRAWING HEAD.

With 1 Set of 4 Steel Rollers 1 /\%inches in Aiameter. 12 inches long on the flutes with one plunger and revolving cans 12 inches in diameter; solid iron sides and cased up to prevent draft or dust gething into the wheds, occuples a sprace of 3 Freet - Inches. long by 3 Feet 6in. Wude Driving poully 6 Inches in Diamever, and shoud run 383\% Rev. lution per minute with Evoner motion.


## No. 43

## THE KEYSTONE COTTON CARD

Has heayy Iron frame \& Caseing, Wain Glinder 45 inches in diam; 7workers 6 ivv, 5 Strippers 3 inchee in diamc; doffer 22 im, ches in dia; all covered with Jenks Parent Mretalized wood; with First and Secona Lickerin, and Patent stripper, and self stripping motion; has adjustable slitung poppet, and long sleeve bearing with protecting flange, doffer .. driven by a diagonat shaft, geared with heavy beval gear from main cylinzder shaft, andthrown in and out of gear by , clutch motion, shell with steel fluted feed rollers 2 inches in atam; has coller and fan motion for a 10 inch can; and adjusta: ble Iron greating zunder main cytinder; occupies a space of 6 Ft. 2 in long by 10 Frt - inches Wide; Driving putley 16 ins: ches inv diam. shouldrun 160 Rev per minute.


## $\pi^{0} 4$

## DRAWING FRAME.

Wivh 2 Heads and 6 Coviers, to eait Heail, Tron Roller Beams 12 inches wule; 4 rows of Rollers; arad 3 Zengble of Rollers to each hexd all of cast steel 1-1 menches ine diazmeter; Improven stop motion, f receüving Rollers; Improved coilers, for 10 inech Cons; upright and Bevel Wheels, to arive each coiler sepenate; stop motion, to sel up from, 2 to 6 Gans por coiler, occupies
 in diameter, shouad run 270 Revoltaper minuate.



Dr 45

## DRAWING FRAME

Wut? 2 Heads and 6 Coulers to oach Head Iron Rotler Beams 12 manes wide, Rows of rollers, and 3 lenght of Rollers to each head all of cast steel $1 / 4$ inches un diametor, Improveal stop mption an receiving Roller; improved Leile for $g$ inches Quns, cupright f Berel Whects to drive each two Giters smorate stop molion to set up from 2 to $O$ dand per Coiler, Occupies a
 me daweter, shoul run 270 Forclution per minute

$$
\begin{aligned}
& \text {...................................................... } \\
& \text { Drawing RTames thead } 8 \text { Coilers "for } 8 \mathrm{ur} \text { Cans }
\end{aligned}
$$



## $N^{\circ} 46^{\circ}$ <br> COUNTER TWIST SPEEDER

Wüh Irow ends, front Roller of Steed $1 \frac{1}{4}$ inches in diameler; middle and back of Iron 1这inches in diameler. Improved List Iwist motion to bring the Twist close to the Bobbins, Tin carrying Roller inches in diameler, be improved Bobbin holder, Driving Pullies 6 inches in diameter, occucpies a space of 18 Frt long by $3 F^{t} 6$ inches wide, and should run 525 Rev per minute 12 Bobbins 8 or 9 inches long



## SLUBBING FRAME.

68 Spinalles, Iron Fotler Beam and Stands, with 3 rows of Steet fluted rol. lers; no creet but a thin roller, we concuct the roping from a can, with 9 Inch lift and centrifugat presser, which mathes a Bobbim $9 \times 4$ lnchs in Diameter, will prow =duce 800 ths of $3 / 4$ hank swbbing per 10 hours. Driving pulleys $12 \times 3$ Inohes, \& stoutd run 200 Rev. per minute, occupries a space of Feet Inches in, length, and Feet Inches in Width.
$\$$


## $\mathrm{N}^{3} 48$

## ROVING OR IACK FRAME.

Has 120 spinale, Ircn Rover Bean and stama; with 3 rows of flested Rollers; 7 inches lift, and umproved centrifugal presser, making a Bobbin $7 \times$ in in $^{3}$. in Diameter, with a Creel, to take ine 9 inches shubbing Bobvins, will proluce 350 Ths of $2 \frac{1}{2}$ hants roving per 10 nouts, driving pulleys $12 \times 3$ inche shoula run 225 revolution per minute octupies a spoce of Ft inches in lenght by $\boldsymbol{F}^{2}$ inches ni wide


$$
N^{\circ} 49
$$

## RINC SPINNING FRAME

With Iron Ends, Rail \& Roller beam; Front Bottom roller 1 in diameter; muadle and back roller 7/8, ixech diarn, all coupled withsquare couplings; Waste or Cleaning roller under front roller; Wood saalues with adjustable weights; long flat top cleaner; Jenk's Patent self = oiling bolster \& step, snarl catcher, conicat hartfor coneing bobbins at each end; Gearing all ot Driving pulley end of frame; occupies a space of $F^{t}$ inches long by $F^{t}$ inches wide; Driving pulloy inches dram; shouldrun Rev per minute.

| 132 | $s$ pinales | $23 / 4$ | in | apt | nings | $1 \frac{3}{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 132 | $"$ | $23 / 4$ | $\cdots$ | $"$ | $"$ | $13 / 6$ |
| 132 | $"$ | $23 / 4$ | $"$ | $"$ | $13 / 4$ |  |
| 168 | $"$ | $23 / 4$ | $"$ | $"$ | $13 / 8$ |  |
| 168 | $"$ | $23 / 4$ | $"$ | $"$ | $"$ | $13 / 6$ |
| 168 | $"$ | $23 / 4$ | $"$ | $"$ | $"$ | $13 / 4$ |
| 204 | $"$ | $23 / 4$ | $"$ | $"$ | $"$ | $13 / 8$ |
| 204 | $n$ | $23 / 4$ | $"$ | $"$ | $19 / 16$ |  |
| 204 | $n$ | $23 / 4$ | $"$ | $"$ | $13 / 4$ |  |



## RING FRAME TWISTER.

$\mathrm{N}^{\circ} 50$




## N. 51 <br> SPOOLING MACHINE.

With Andikys or Blocks 9 inches in diameter; Improved Tsuread Guide and arthes; for spools 6 inches long, 4 inches Headj woat Suifts or Spinalles for 符rostie bobbins,

 shauld rur ofo per maroute

| 72 Blocks | 24 spocts | \$ |
| :---: | :---: | :---: |
| 15 do | 30 do | 8 |
| 24 do | 48 do | \% |
| 30 do | 60 do | $\$$ |
| S倠ifts. | ach. | $\$$ |
| Runners |  | $\$$ |



Inth of WBoell 3ı1Walnut $S^{t}$ Philada.

## N: 52

## BOBBIN WINDER

With horizontal spinilles driven with a cin Oylinder for spooler bobbins Driving Pulleys 9 In diameter, and should run 200 Revolution per minute. Dccupies aspace of $\Rightarrow$ Feet $\theta$ in long, br 2 Feet $h$ in wide

| 25 | Spindles . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |
| :--- | :--- |

25 Spindles with Eccentri: gearing for winding from swifts 18 in diameter .......


## WARPING MILL

Twenty yards in circumference, formed by 30 upright staves well braced and cross stayed inside; Heck with with 160 Eyes and creel With 10 rows of spools, and 16 spools high, Iron shaft and Wood Jack post; and is worked by stem Power or by hand; ocumpues a space of F't inches bong; by $F^{t}$ inches wide; has driving pulleys 7 in \& in Face; and should rum Rev per minute

Thus machines is to mate warps


TV Bocll Iith 312 \& 314 Walnut StPh.

## WARPING MACHINE.

This Machine is so constucled that it makes the Warp at one of any regutred lervatin, and any giving number of onds, sifort one to two thonesamet, thus gionig it a daim of supericrty over ary other mow ine use. Thu Jiachine is made wath a






## 2":

## BEAMING MACHINE

with 3 Friction arsims 20 Inches biamen with woght levers. Fob weighted Lease Racks one of 16 pins and che sther of 32 pba, Wrath with ios demt or fo  or at Feet - In . long by ? feet st fre wiale.




No 56

## COP WINDER.

For Winding from the skem to the shuttle bobbin, $x_{\text {pindiles and Bobion verticat; Rumners for the stern, Driving }}$ pudies 8 inthes in diameter and should run 260 revolw $=$ tion per minute.


## Ho 57 <br> REEL FOR TWISTER OR THROSTLE SPOOLS.

Jentis Patent for rempying the skenns from the Feel without lifing the shaft.
Has oxen or sotid Iron ends Reel 5 手 inches in circumference with Gusprie shaft 21/4 Inches in diameler, and Iron arms; with Bobbin box, and to live spmindles + inclies appart, for spools wath heads, 3 inches ï diametre has Requiator and Bud, occuples a space
 shouda rimat20 revolution per monute
$\qquad$


## 7. ${ }^{\circ} 58$ <br> HOSIERY WINDER

This Machine is used for winding a Cone shaped Bobbin for Hosiery Krithers has 100 Spinales, 50 on each side 4 inches aparet; Bobbin 8 inches by $3 \frac{1}{2}$ unches in aiameter; Drwing puaties $7 \frac{1}{2}$ enches in Diameter; occupies a space of $19 F^{+}-7$ Ing by 6 Feet 2 üches wiale, and stowla run . Revolution jer minvete.


