



CRC

for

Premium

Quality

Wool

# Processing on the Woollen System

Produced for the CRC for Premium Quality Wool undergraduate program by;  
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# Blending prior to Carding

## WHY BLEND?

- To form a homogeneous batch
- To be cost effective
- To avoid irregularities of dyed colour
- Add special effects or other fibres

**More intimate fibre to fibre blending takes place during carding**

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# Systems of Woollen Blending

- pile, stack or layer
- batch
- continuous
- semi-continuous

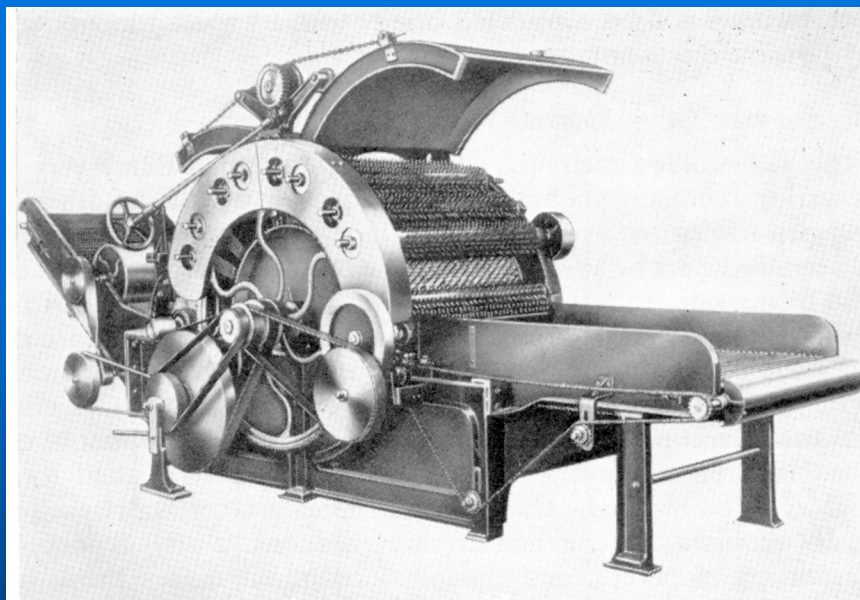
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Fearnought

Lorraine Osborne

Source: Brearley, A., (1965)



# Why Oil?

- Minimise fibre breakage
- Reduce fly
- Quantities
  - Worsted  $\frac{1}{2}\%$
  - Woollen 7%



cohesive properties make a stronger web

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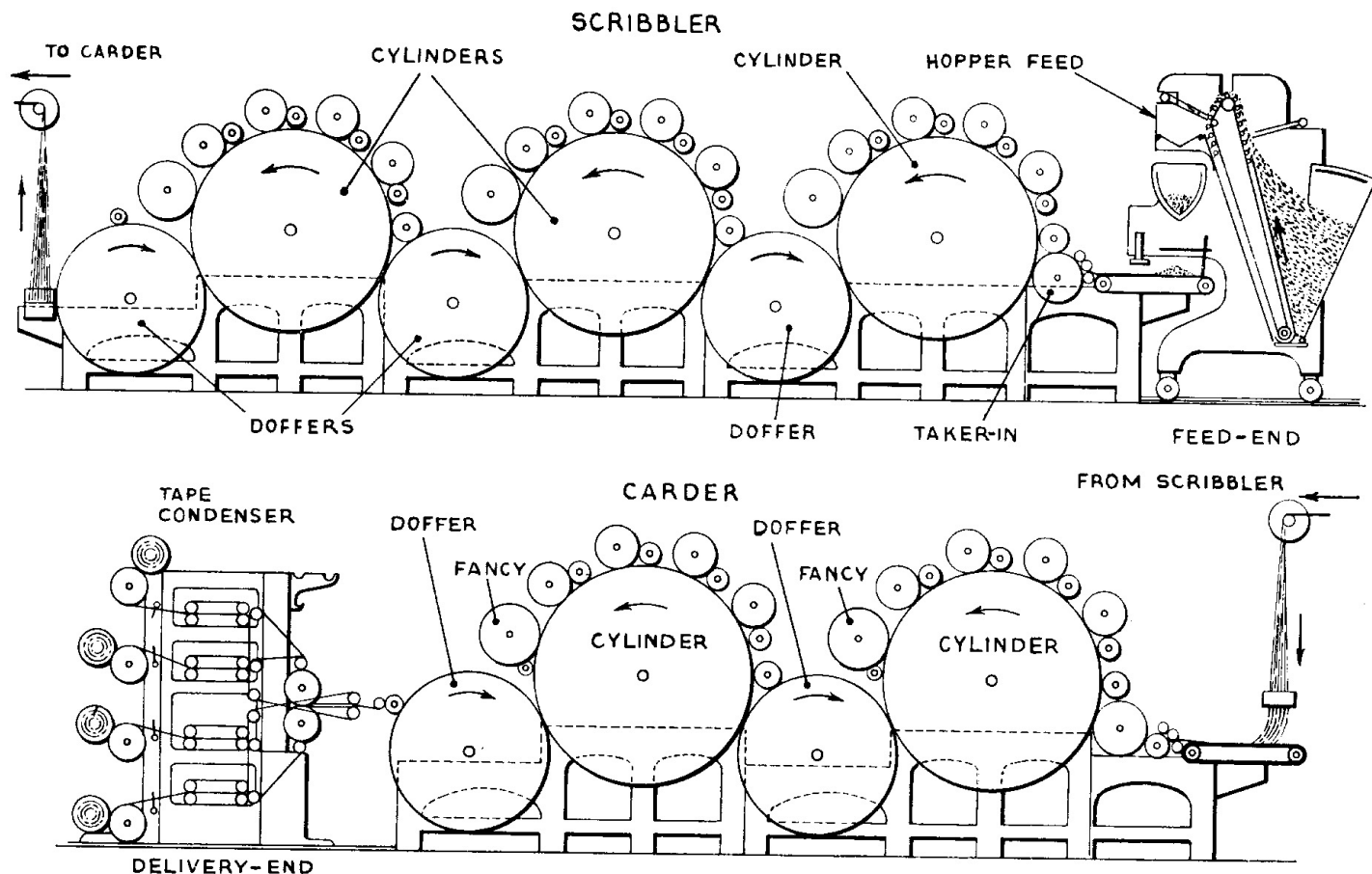
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# Typical Woollen Carding Set



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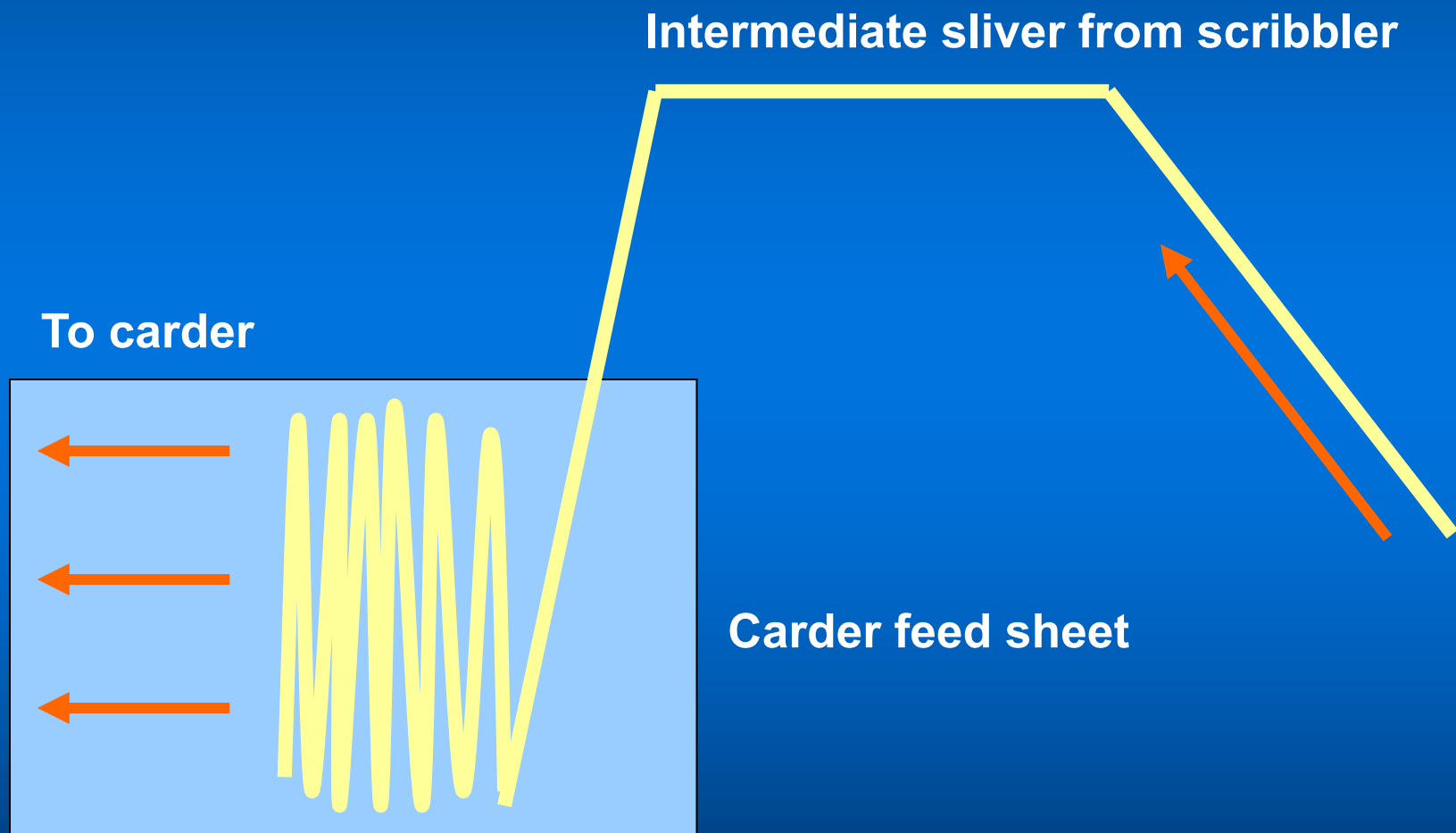
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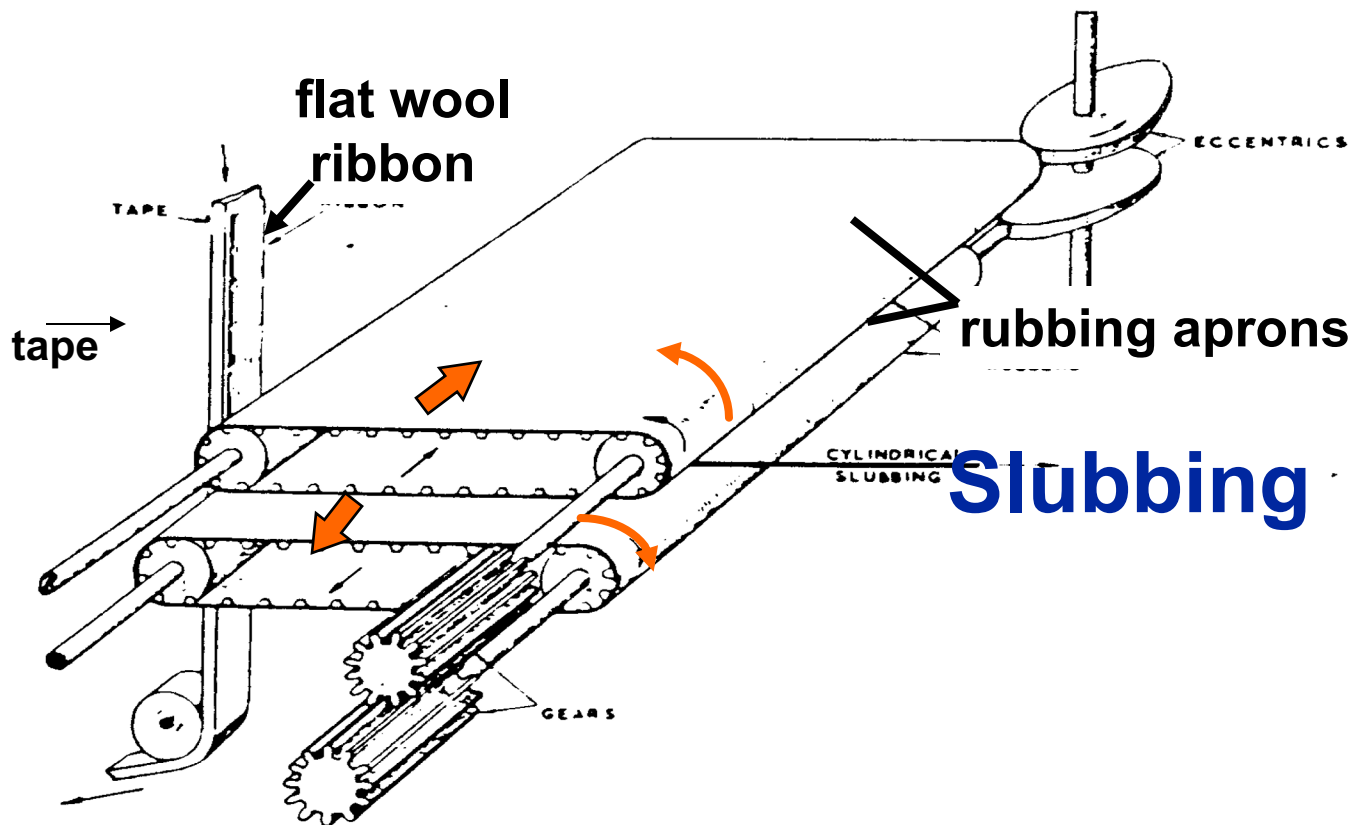
# Transfer of Intermediate Sliver

## Scotch feed mechanism





# Tape Condenser



— Diagram illustrating the action of the rubbing aprons and eccentric motion<sup>106</sup>.

**Slubbing**

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Source: Brearley, A., and Ireland J. A. (1981)





# Condenser bobbins ready for transfer to the spinning frame

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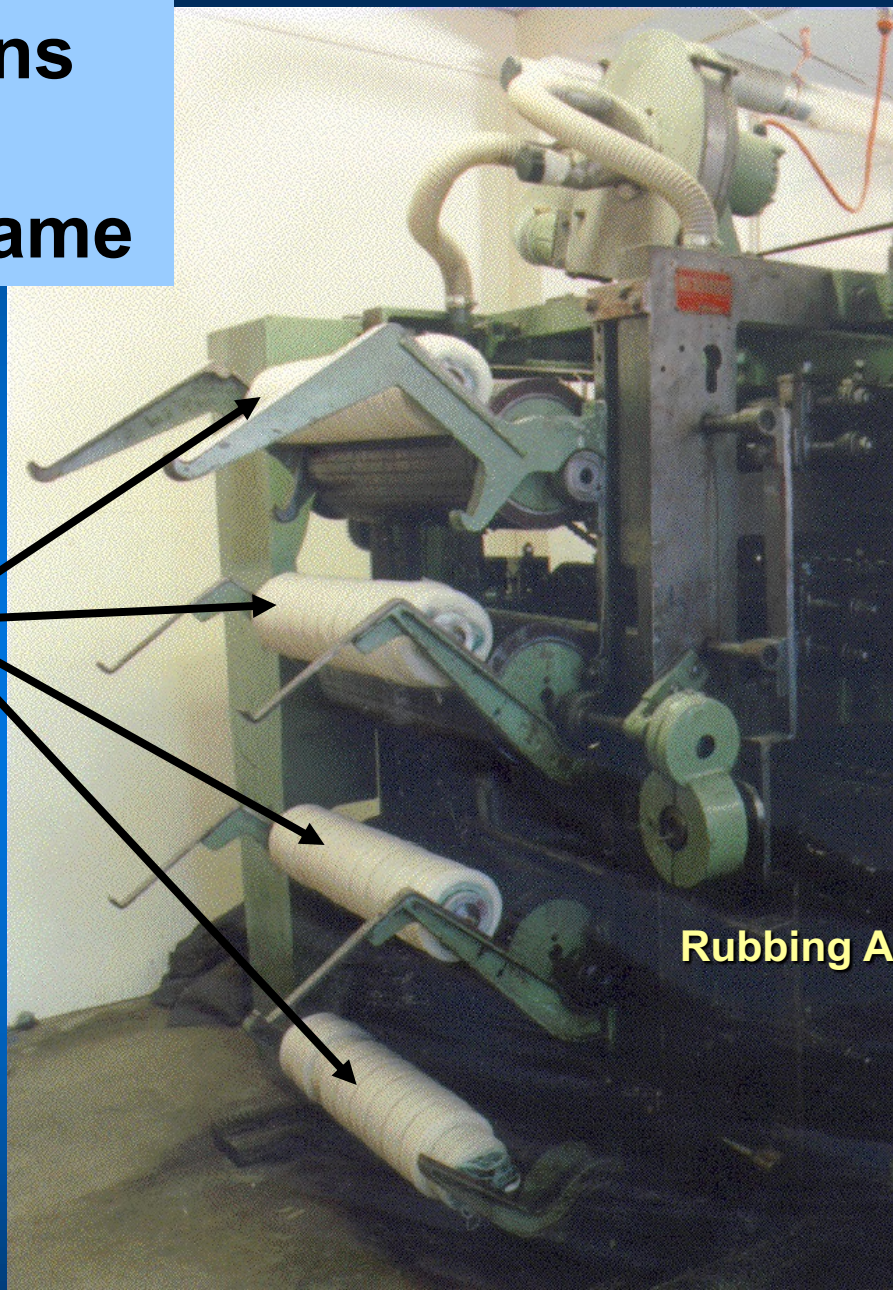
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Ten individual slubbing  
cheeses on each  
condenser  
bobbin



Rubbing Aprons





# Spinning Comparison

	WOOLLENS	WORSTED
INPUT	Slubbing	Roving
DRAFT	1.3	30
FIBRE CONTROL	False Twist	Double apron
TWIST	Ring	Ring
WINDING-ON	Spindle	Spindle
No. of FIBRES IN X SECTION	100-120	35-45

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# Recommended reading

- Brearley, A., and Ireland, J. A. (1981), “The Woollen Industry”, (WIRA: Leeds)
- Von Bergen, W., (1969), Wool Handbook, Vol 2, John Wiley & Sons.

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