

HOOK

Journal of the Textile Institute 1973sus 11 R.E. Belin “Hooked Fibres in Carding and Gilling” .

가 carding hook
Gilling draft
hook . Hook hook
hook 가 . Gilling hook
drafting drafting . hook
drafting 가 .
Gilling
가 hook 가
.

1.

Card Gilling Drawing Sliver hook
.
Drawing hook hook 가
Hook
hook
1Gilling Combing hook noil
.

Card Sliver hook
 hook hook가
 hook 가
 hook 가 hook
 carding carding Gilling
 2.
 2.1
 2.5, 5.0, 7.5cm 가 Black wool 60's 64's Half-warp
 wool top
 (60's/64's Half warp wool) Card sliver lot A,
 B, C . lot 0.04% Black Wool lot A 2.5cm,
 lot B 5.0cm, lot C 7.5cm . 7.5cm Black wool
 lot Black wool 가 20 k-tex sliver 100 /m .
 Black wool card Sliver
 (10) Sliver .
 Black wool carding lot carding
 가 . (
 hopper 가 card sliver
 가 .)

2.2 Gilling

Gilling Warner & Swasey pin drafter Back roller
가 drafting . Gill-box
faller 1,000drops/min faller-bar pitch 7.94cm . Flat pin
1cm 5.5 60%
.
drafting 3.0cm . drafting
가 .

2.3

1m Sliver 1m
methyl salicylate . methyl salicylate
가 Black wool . Sliver가
.
Sliver 6
.
200~300
27 . 가 .
가 hook 가 0.4cm hook
.
hook
가
comb(6) Schlumberger comb 0.4cm hook
comb 0.4cm hook
.
Card Sliver

Gilling

hook(T hook)

hook(L hook)

.

가

.

.

가

가

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2.4

Back roller가

(Gill-box

draft) Front roller가 comb

(Gill-box

draft)

2

3coactor

.

factor

1) Gill-box Sliver

2) draft

3) draft Gilling

. draft 4.4 1 draft 5.0 1

Gill-box sliver

.

factor (2.5, 5.0, 7.5cm) Black wool 가

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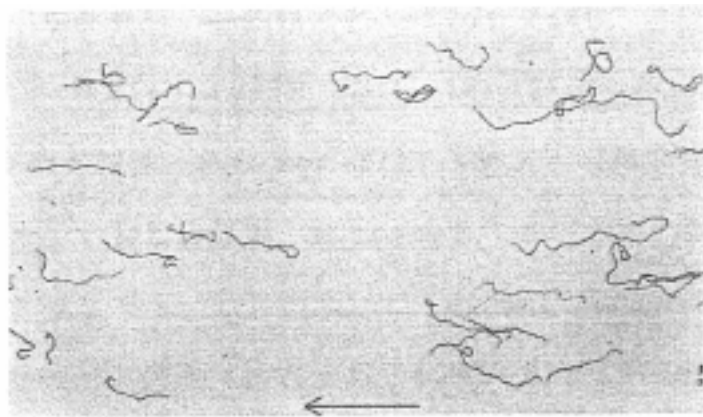
2.5

< 1> (a)(b)(c) card sliver 2.5, 5.0, 7.5cm

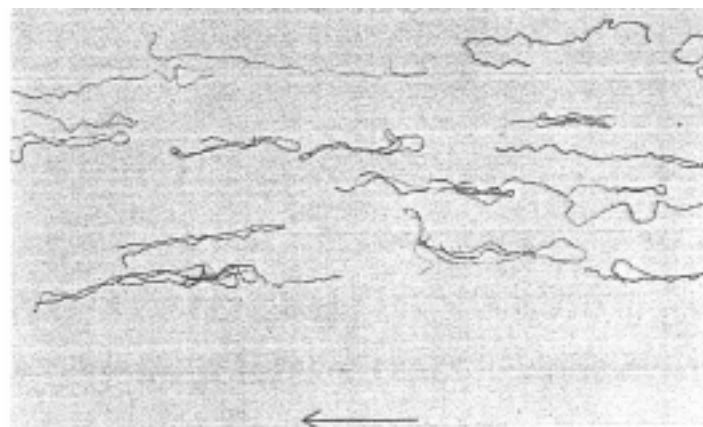
Black wool < 1>(d) Sliver

draft gilling 1 . < 1> (a)(b)(c)

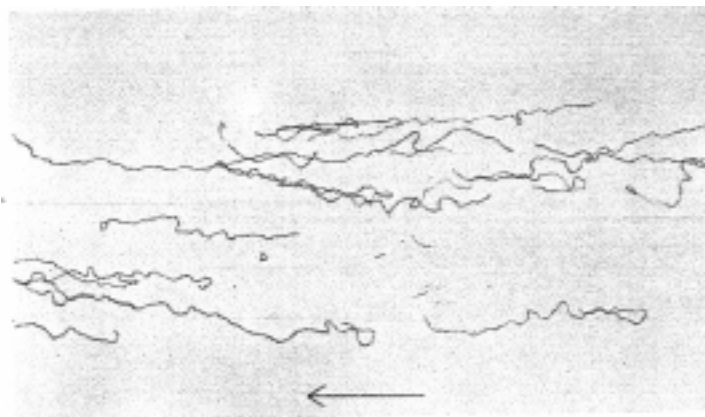
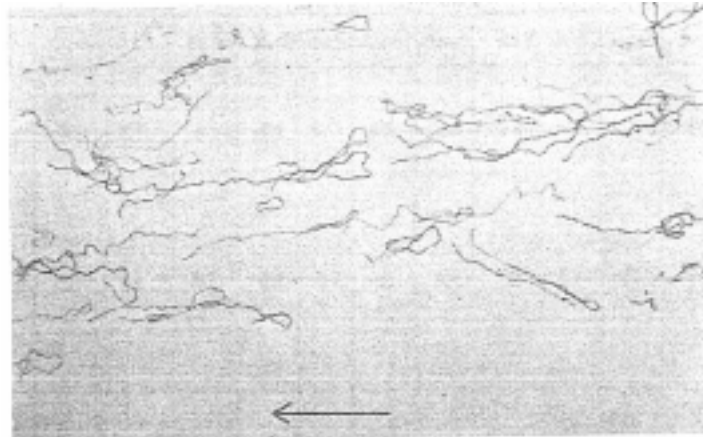
가 sliver
 . < 1>(c) (d) card sliver
 Gilling Sliver sliver 7.5cm
 가 가 hook .
 T hook, L hook hook <
 1> (2.5, 5.0, 7.5cm) Black wool



(a)



(b)



< 1> Typical photographs of black trace fibres within slivers immersed in methyl salicylate(a), (b), and (c) 2·5-, 5·0-, and 7·5-cm Fibres respectively, in card sliver (d) 7·5-cm Fibres after one gilling operation with the sliver fed in the same direction as it leaves the card(i.e.,reverse to normal)

Arrows denote the directions of the leading end of fibres

< 1> normal direction T hook가 gill-box
reverse direction card wool gill-box
T hook가 . hook T hook L hook
100 hook 가 .

Fibre Length (cm)	Percentage of Hooked Fibres												Direction of T Hooks
	Straight			T Hooks			L Hooks			Double			
	2.5	5.0	7.5	2.5	5.0	7.5	2.5	5.0	7.5	2.5	5.0	7.5	
(1) Card	49	27	19	29	46	52	9	10	6	13	17	23	Trailing
(2) Back draft (normal direction)	51	41	44	20	32	28	15	15	16	14	12	12	Leading
(3) Back draft (reverse direction)	50	34	32	29	44	49	10	12	7	11	10	12	Trailing
(4) Front draft (normal direction)	48	41	30	36	43	55	7	5	4	9	8	11	Leading
(5) Front draft (reverse direction)	61	60	69	21	18	9	10	15	16	8	7	6	Trailing
(6) Back and front draft (no- mal direction)	48	46	39	30	37	36	14	10	9	8	9	16	Leading
(7) Back and front draft (reverse direction)	54	58	69	15	14	8	19	16	17	12	12	6	Trailing

가

가

.

T hook

L hook가

card

doffer

•

.

hook

가

faller

hook가

 $\cdot < 1 >$

2

가

가

가

T hook가

2)가

```
L hook('L hook'
```

.

 $\langle 1 \rangle$

drafting

hook

2 5

T

pin

faller

• , pin

가 pin

hook .

L hook drafting(4) drafting(3)

가 .

Gilling draft hook sliver

4 5 가 . Card sliver가

can T hook drafting

. hook

hook L hook ('T

hook' 4).

Sliver가 card Gill T

hook drafting .('T hook'

5). drafting L hook ('L

hook' 5). L hook 5 L hook 가 가 hook

T hook . drafting

drafting 가 hook

.

6, 7 4, 5 Sliver (6)

drafting

drafting drafting

.

[6] hook가

hook가 . 2, 6 3, 7

drafting drafting

. hook 가 hook 가 가

. drafting drafting
 drafting drafting
 .

2.6 Hook

Hook . card Sliver

L hook T hook .

(2.5, 5.0, 7.5cm) hook

30% .

Gill Sliver Card Sliver 가 L T hook

card sliver

25% . Gilling hook

. hook가

.

7.

Carding Sliver hook 2.5, 5.0,
 7.5cm 12,14,17% . carding

. Gilling

가 2% 가 . drafting Sliver (T

hook) Sliver 가

.

T hook .

3.

Card	가	hook	hook	hook
가	가	.	hook(hook)	
2.5, 7.5cm	42, 75%		hook	10%
.				
Gill-box	drafting	hook		
		draft	hook	
.			hook	
.			Sliver가 Card	
	1 Gill-box	.		
가	가	.	hook	hook hook
				Card
Sliver	30%, Gill sliver	25%	.	