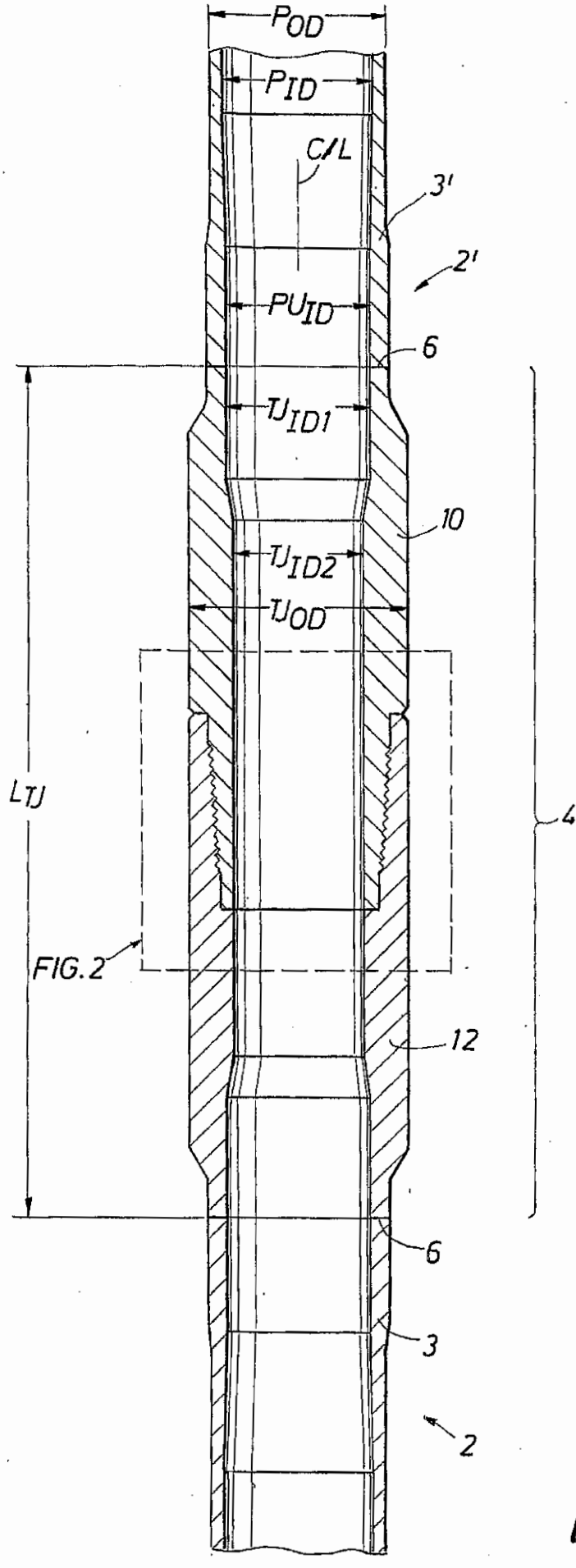


FIG.1

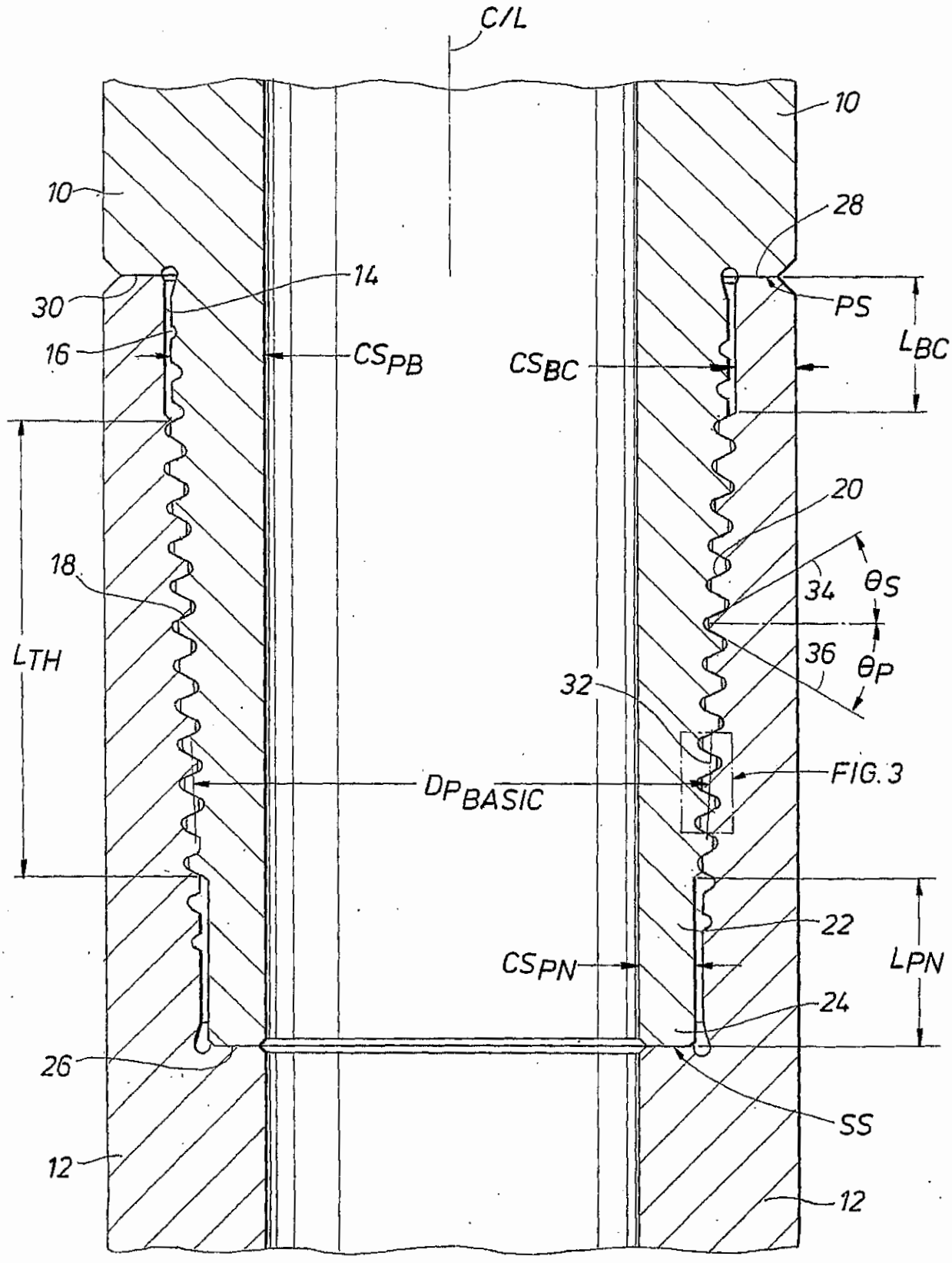

C/L
10
10
28
14
30
16
CS_{PB}
CS_{BC}
PS
L_{BC}
20
18
34
θ_S
36
θ_P
L_{TH}
32
FIG. 3
DP_{BASIC}
22
L_{PN}
CS_{PN}
24
26
SS
12
12

FIG. 2

FIG. 3

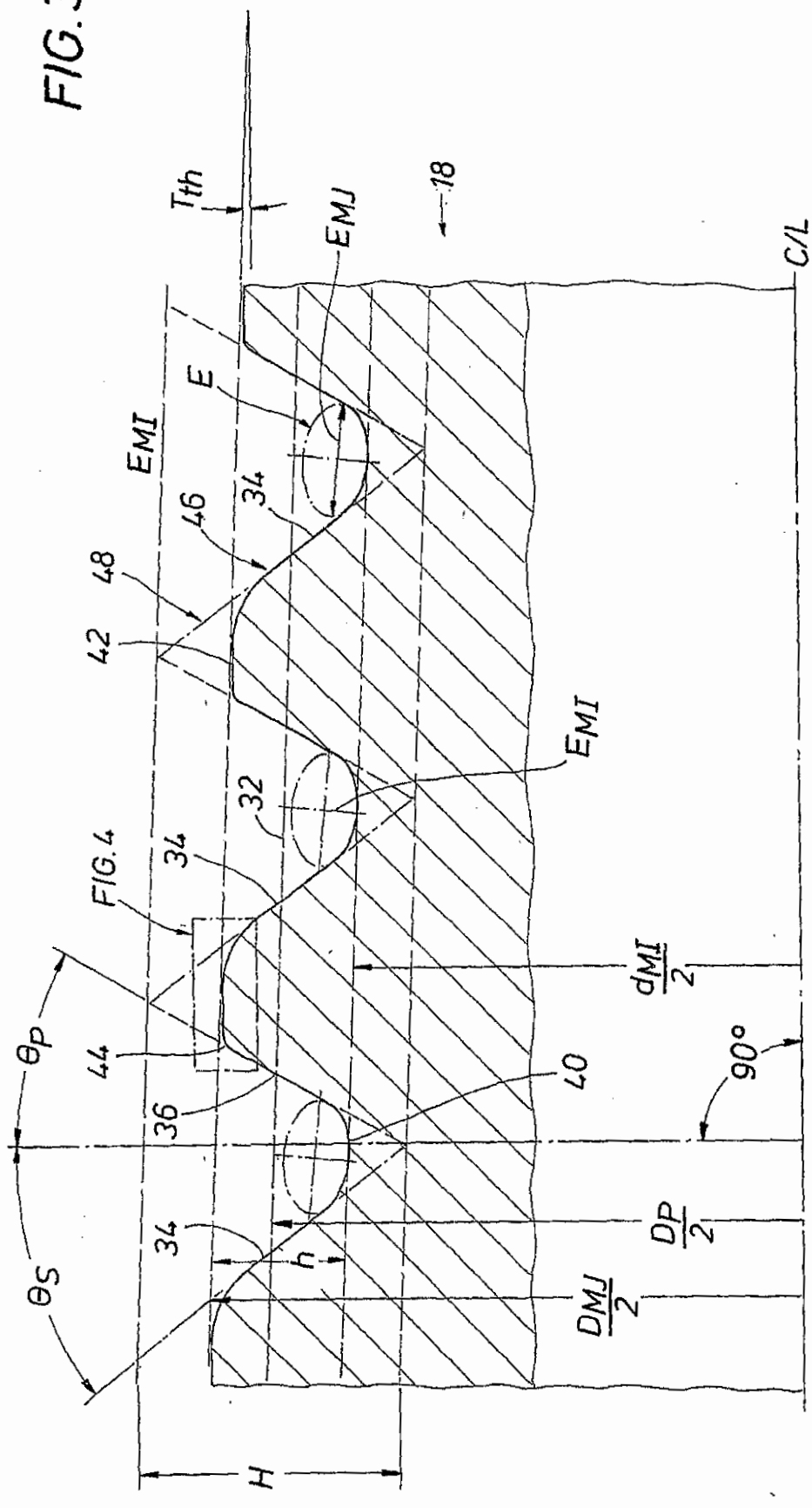

Tth
EMJ
18
C/L
E
EMI
46
34
48
42
EMI
32
FIG.4
34
44
36
40
θP
θS
90°
dMI/2
DP/2
DMJ/2
34
h
H

FIG. 4

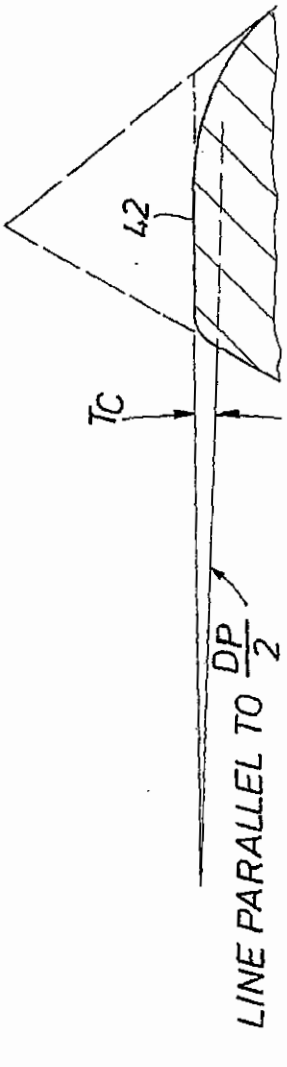

42
Tc
LINE PARALLEL TO DP/2

FIG.5
(PRIOR ART)

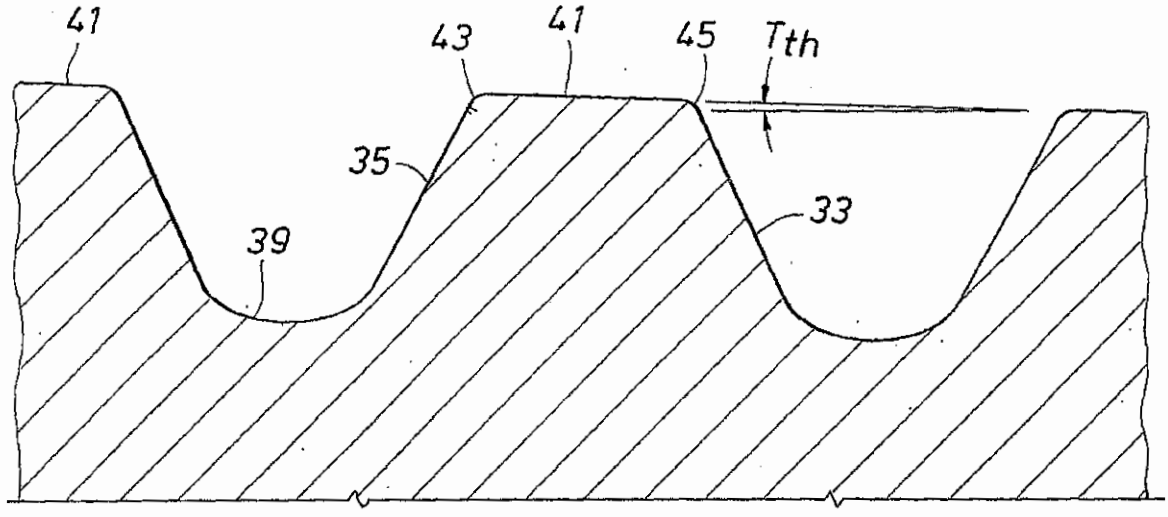


FIG.6A
(PRIOR ART)

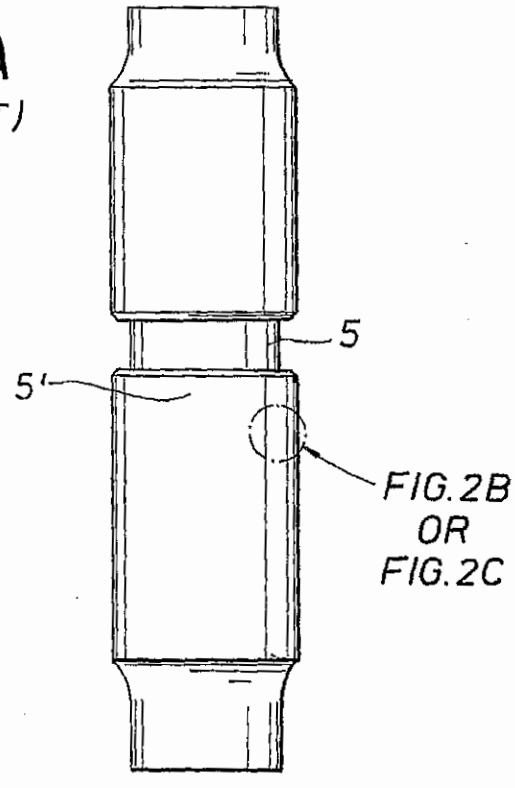


FIG.6C (PRIOR ART)

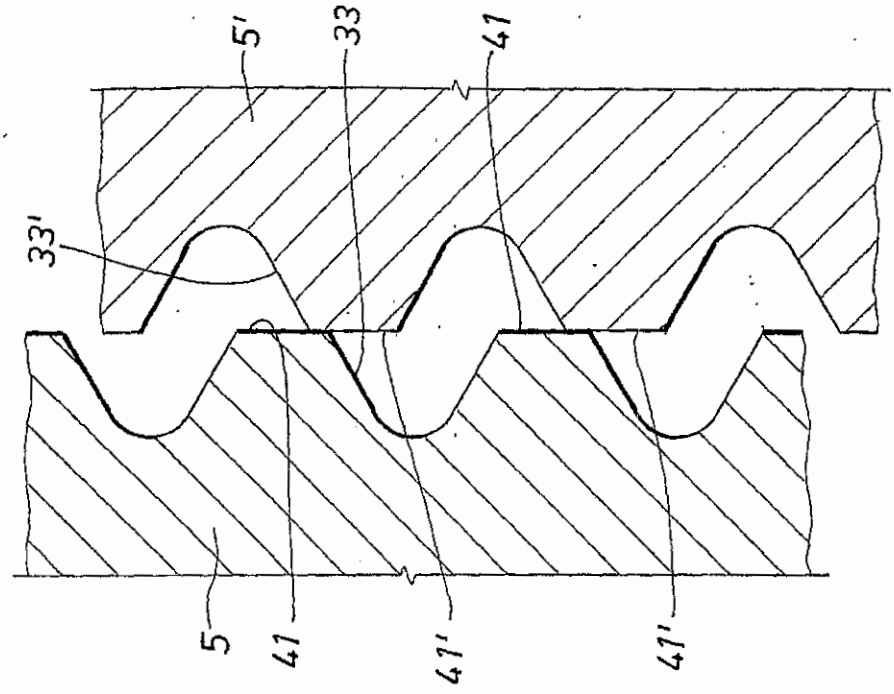


FIG.6B (PRIOR ART)

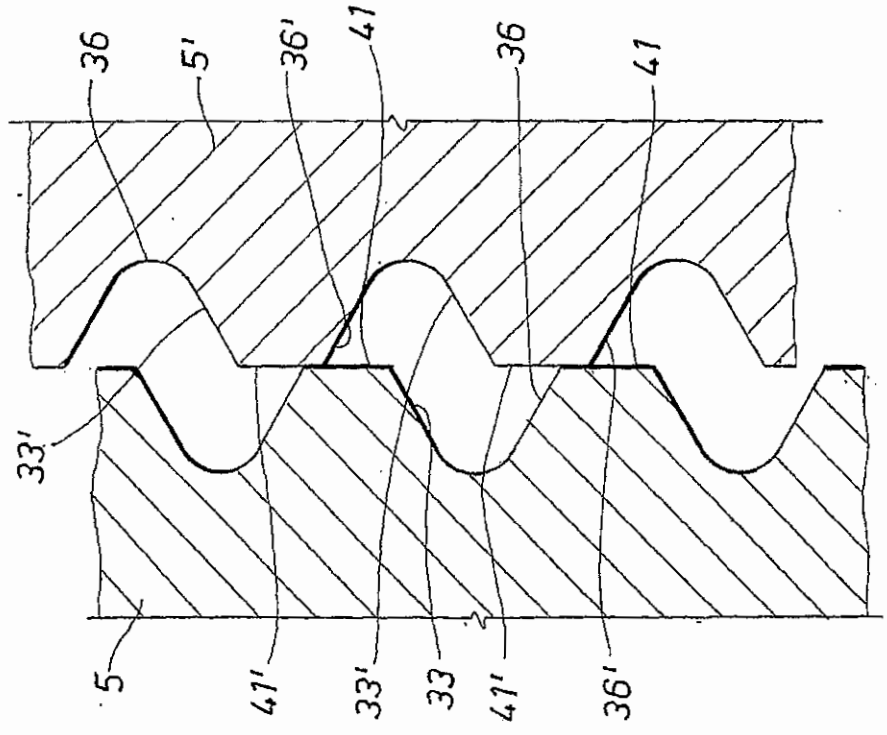


FIG. 7C

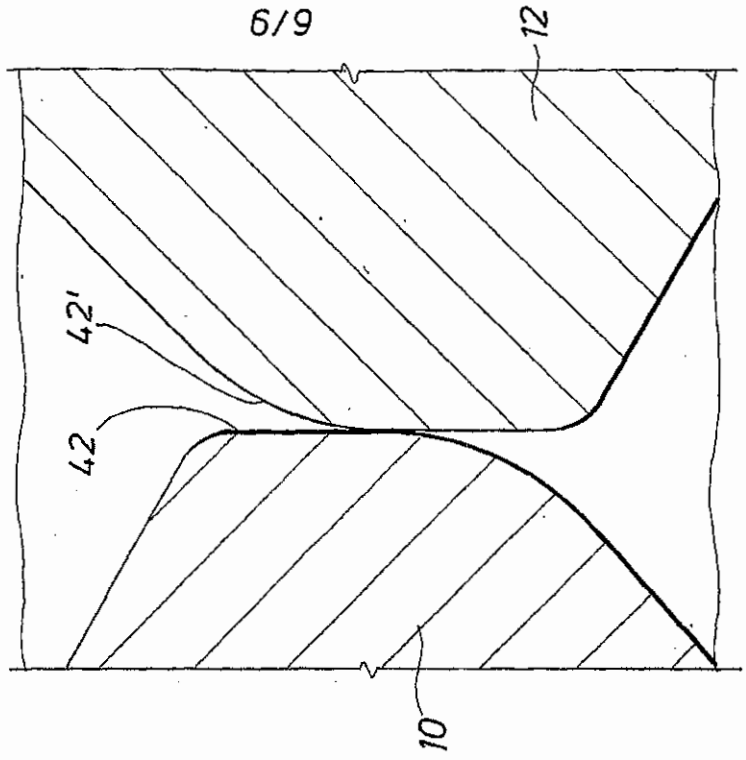


FIG. 7B

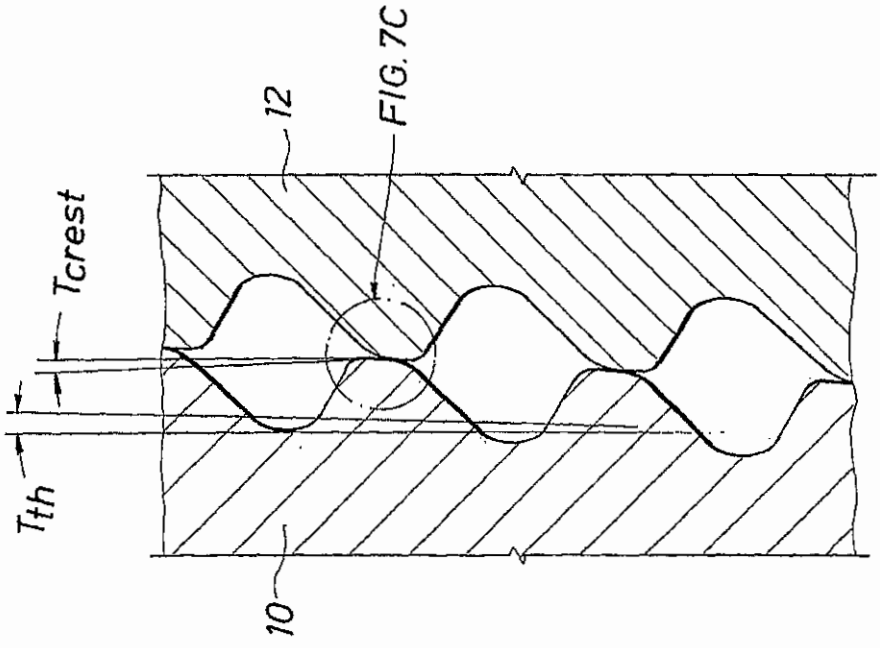


FIG. 7A

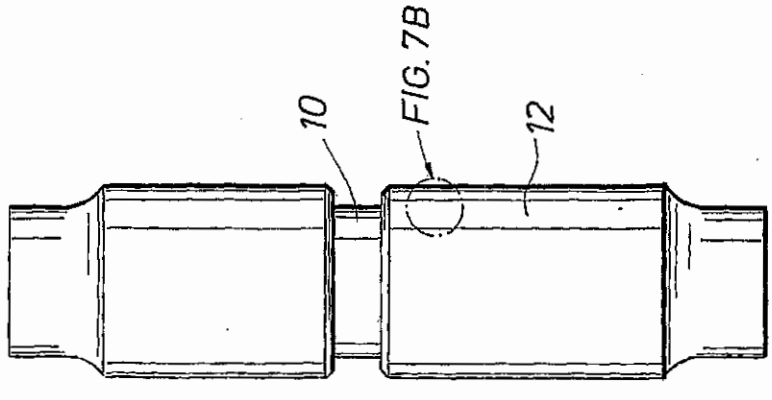


FIG.8A

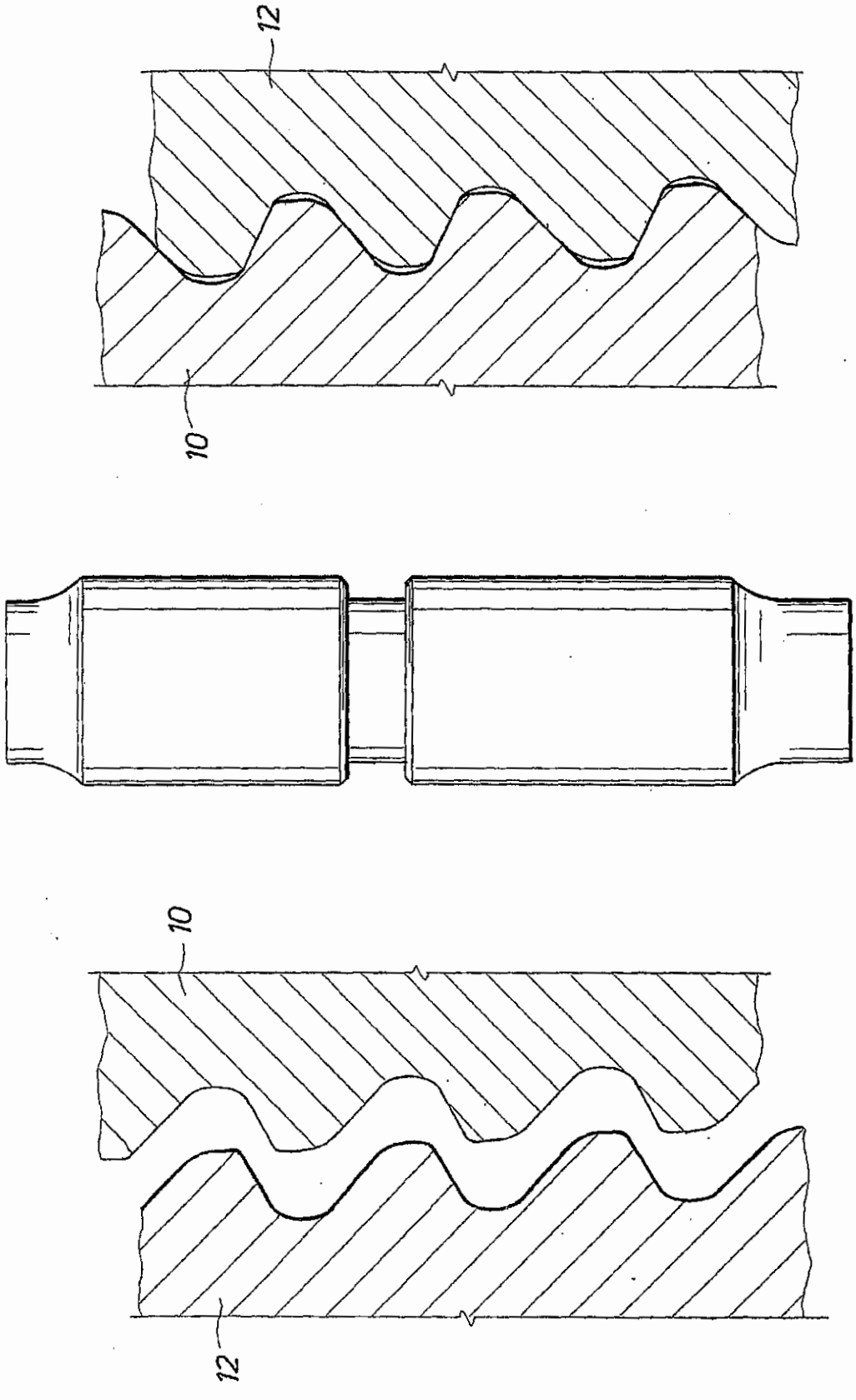
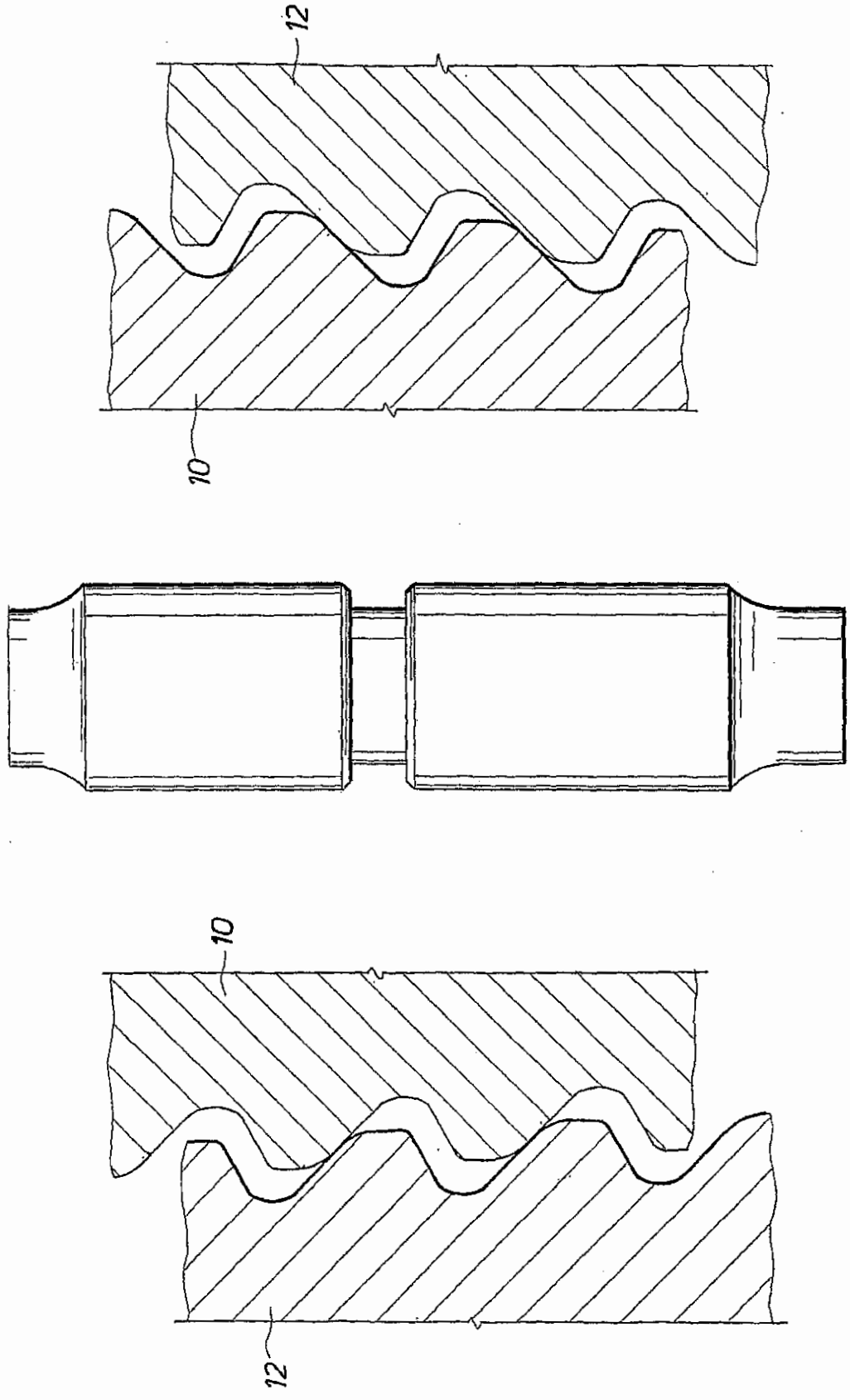


FIG.8B



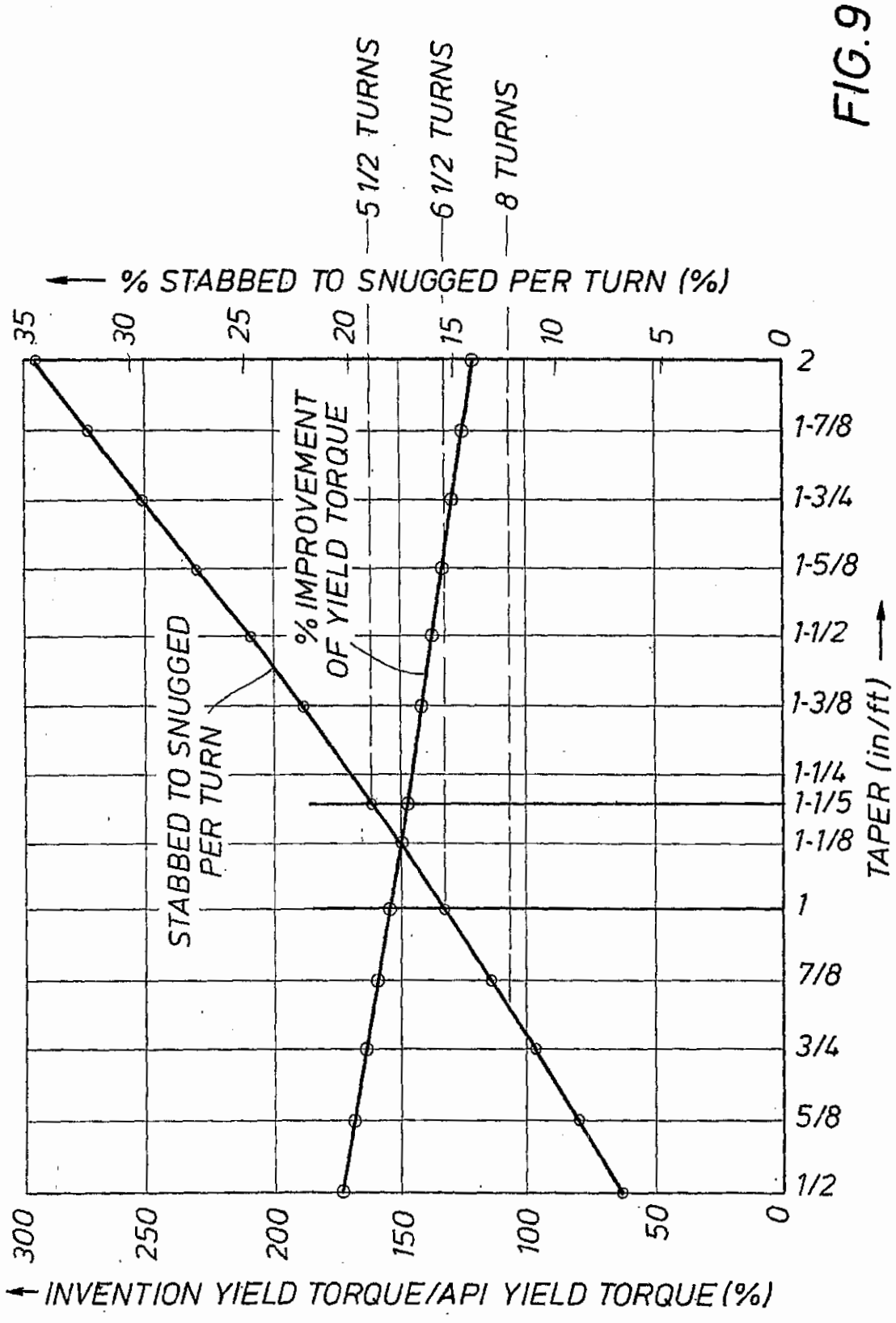

5 1/2 TURNS
6 1/2 TURNS
8 TURNS
% STABBED TO SNUGGED PER TURN (%)
35
30
25
20
15
10
5
0
% IMPROVEMENT OF YIELD TORQUE
STABBED TO SNUGGED PER TURN
2
1-7/8
1-3/4
1-5/8
1-1/2
1-3/8
1-1/4
1-1/5
1-1/8
1
7/8
3/4
5/8
1/2
TAPER (in/ft)
300
250
200
150
100
50
0
INVENTION YIELD TORQUE/API YIELD TORQUE (%)

FIG.9