FIG. 1

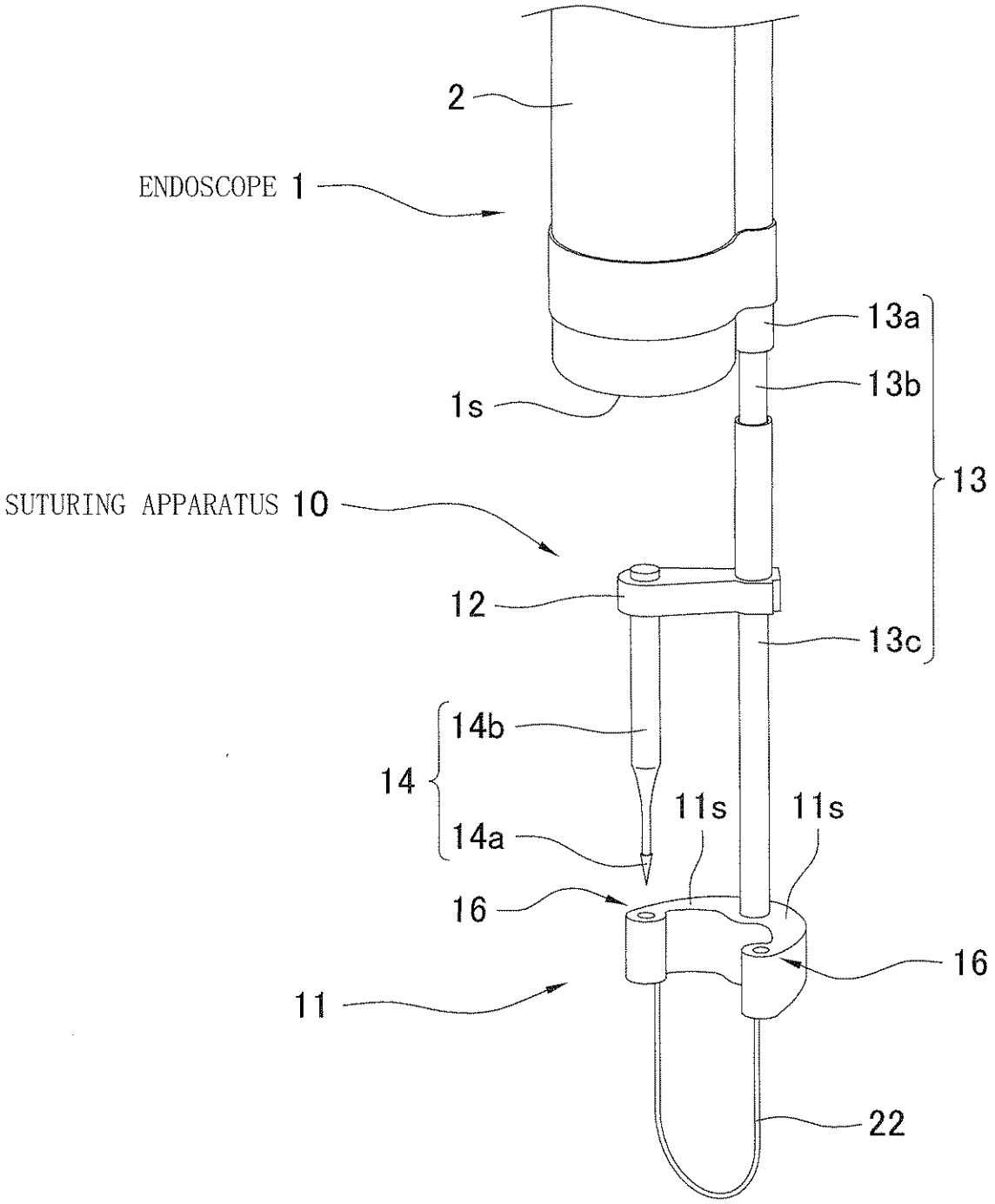

2
ENDOSCOPE 1
13a
13b
1s
13
SUTURING APPARATUS 10
12
13c
14b
14
11s
11s
14a
16
16
11
22

FIG. 2

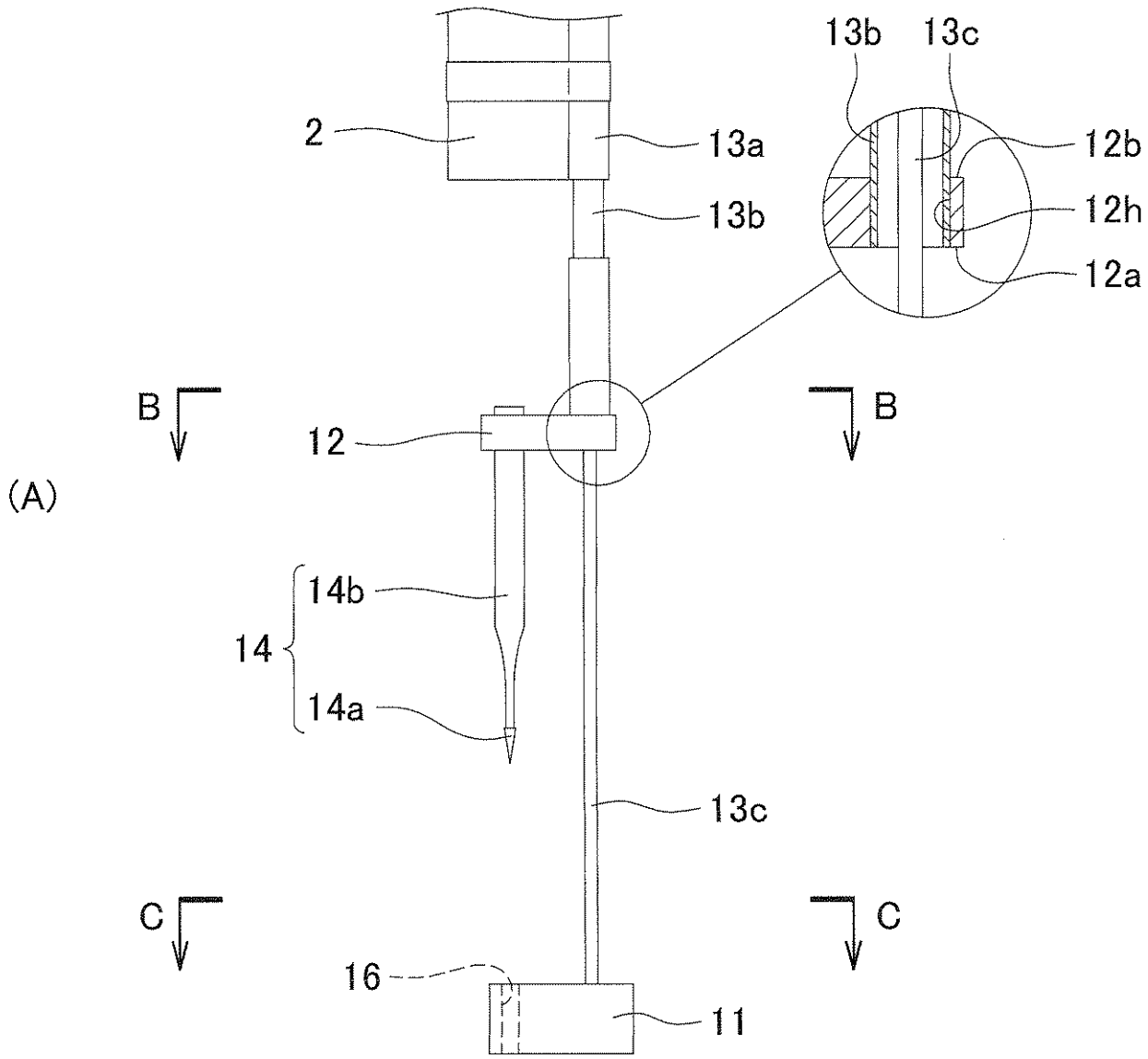
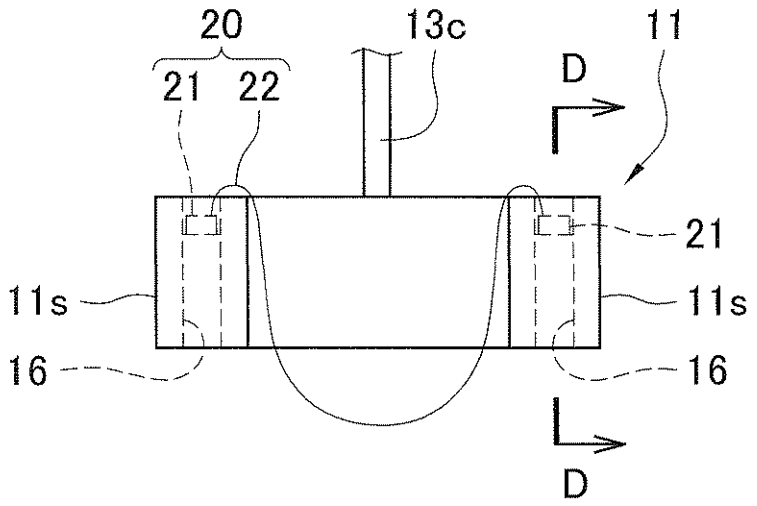

(A)
2
13a
13b
13b
13c
12b
12h
12a
B
B
12
14
14b
14a
13c
C
C
16
11
(B)
11
13c
13b
11s
11s
14
14

FIG. 3



(D)

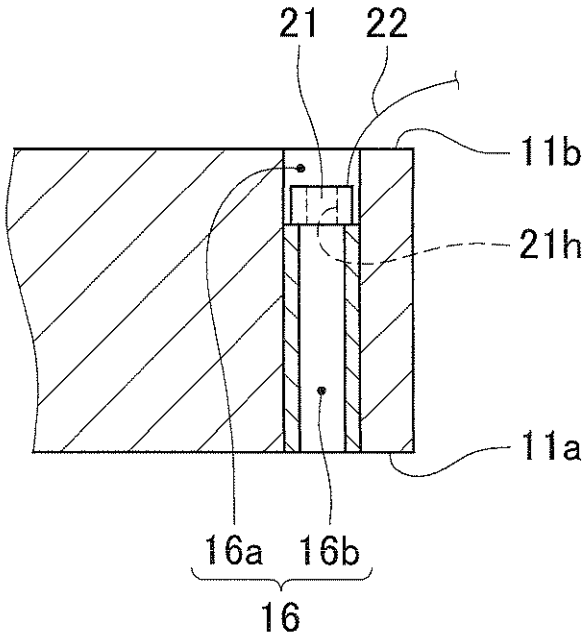
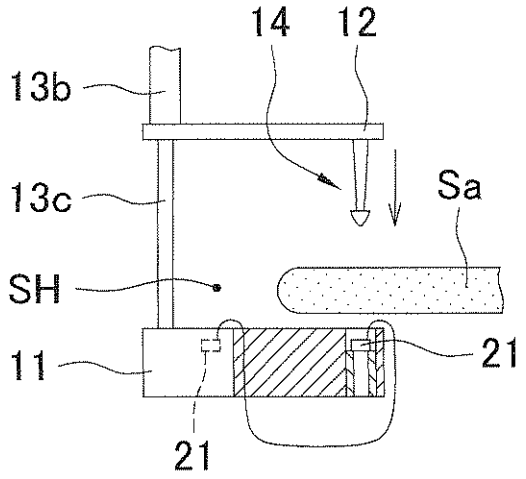
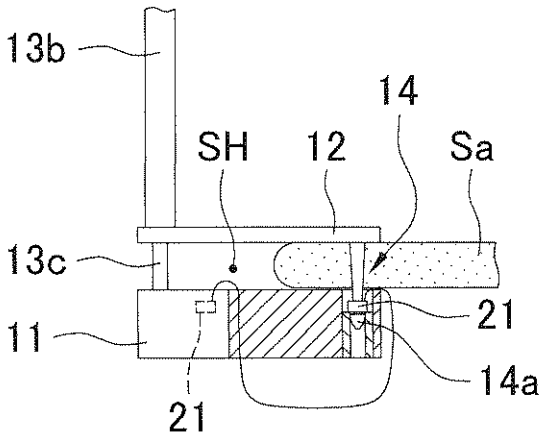


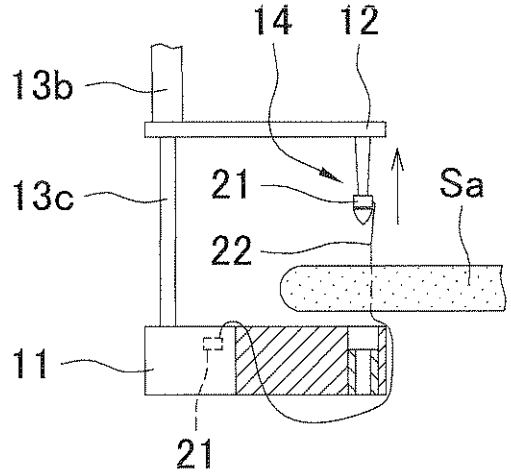
FIG. 4


14
12
13b
13c
Sa
SH
11
21
21

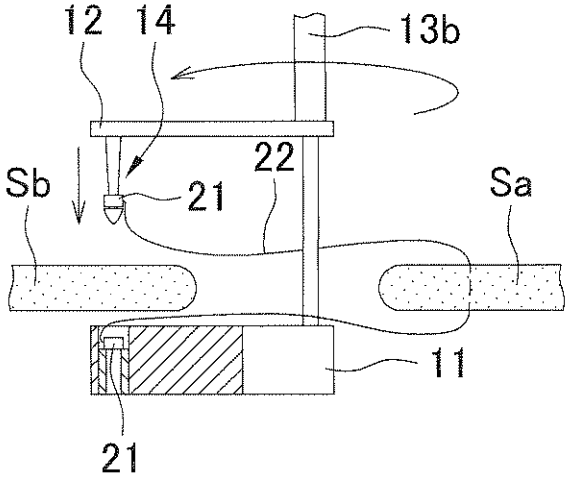
(1)


13b
14
SH
12
Sa
13c
21
11
14a
21

(2)

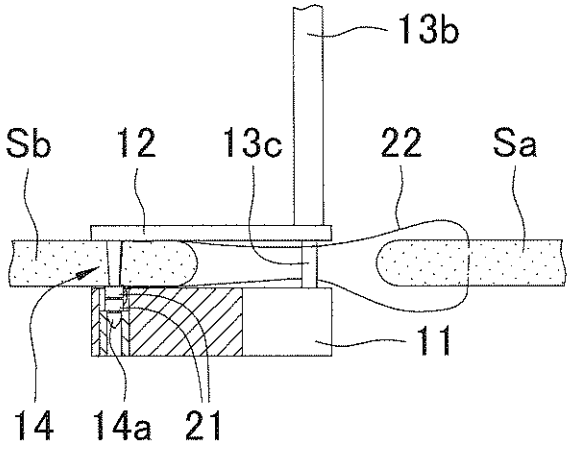

14
12
13b
21
Sa
13c
22
11
21

(3)

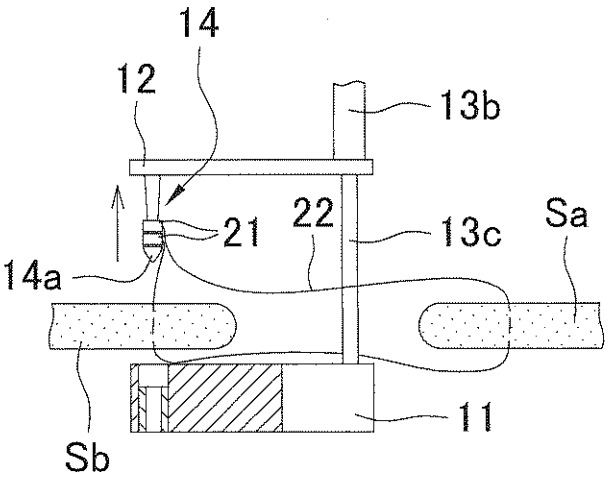

12
14
13b
22
Sb
21
Sa
11
21

(4)

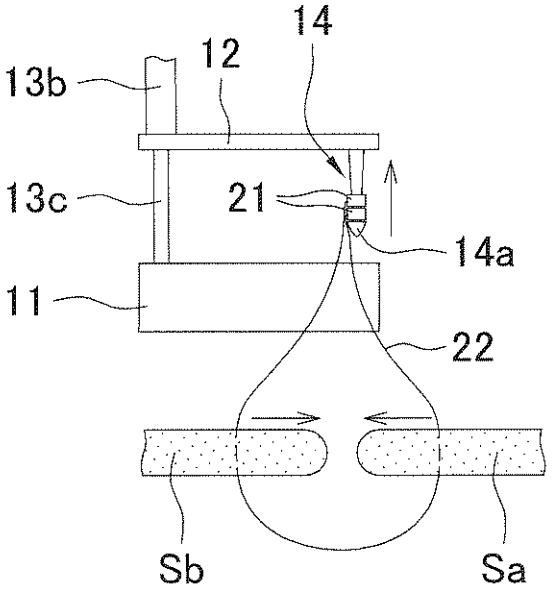
FIG. 5


13b
Sb
12
13c
22
Sa
11
14
14a
21

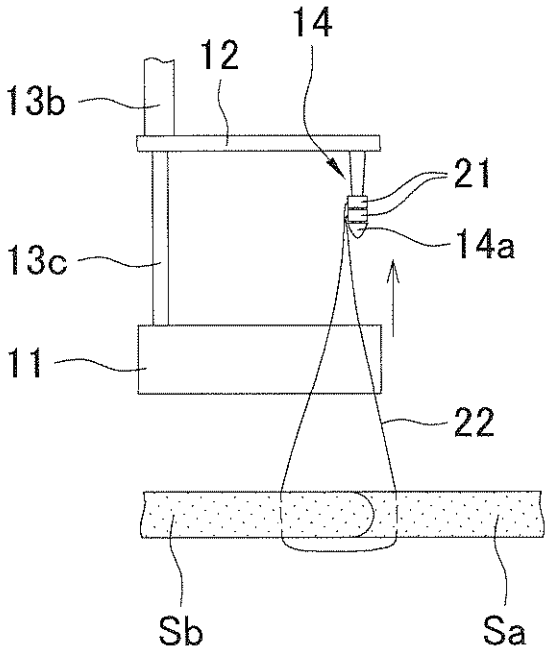
(5)


14
12
13b
21
22
13c
Sa
14a
Sb
11

(6)


14
12
13b
13c
21
14a
11
22
Sb
Sa

(7)


14
12
13b
21
14a
13c
11
22
Sb
Sa

(8)

FIG. 6

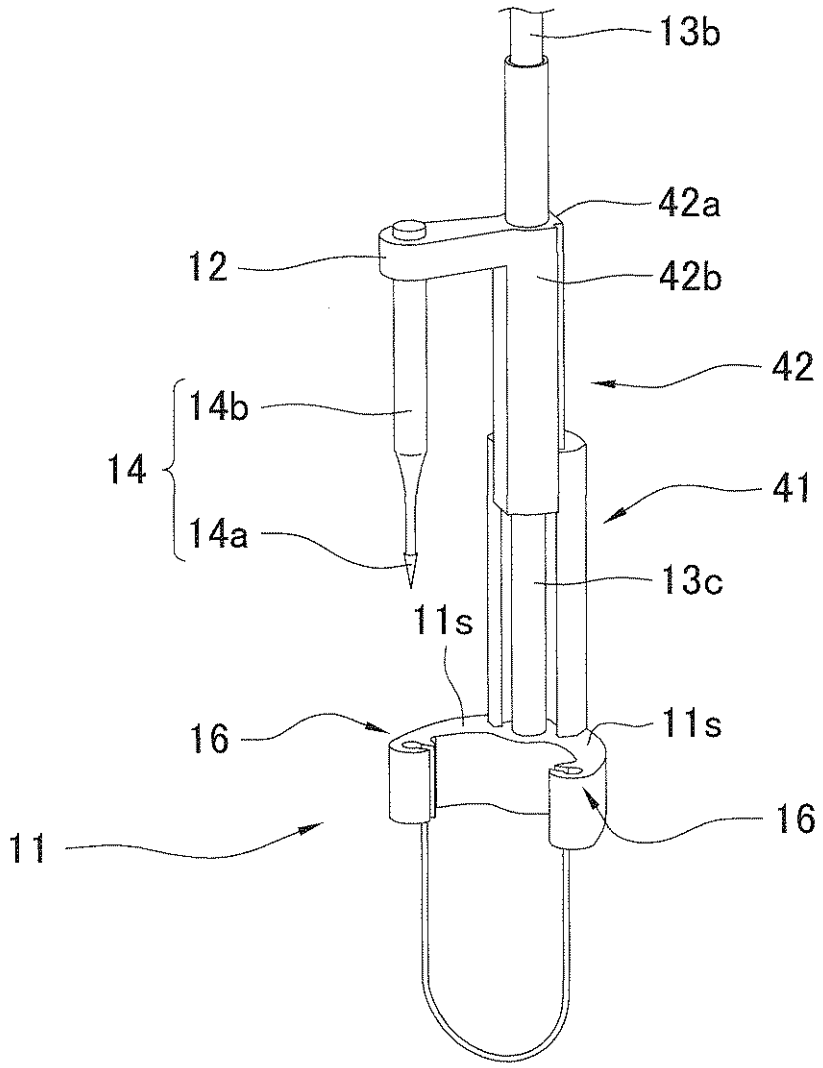
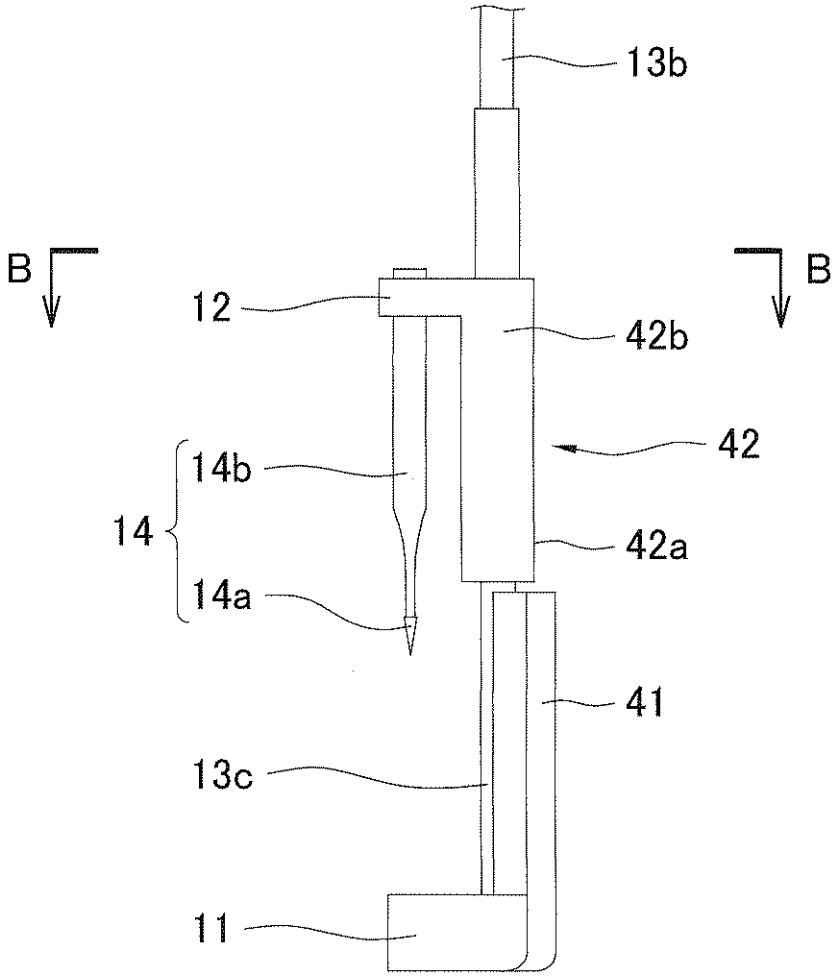


FIG. 7

(A)


13b
B
B
12
42b
42
14b
14
42a
14a
41
13c
11

(B)

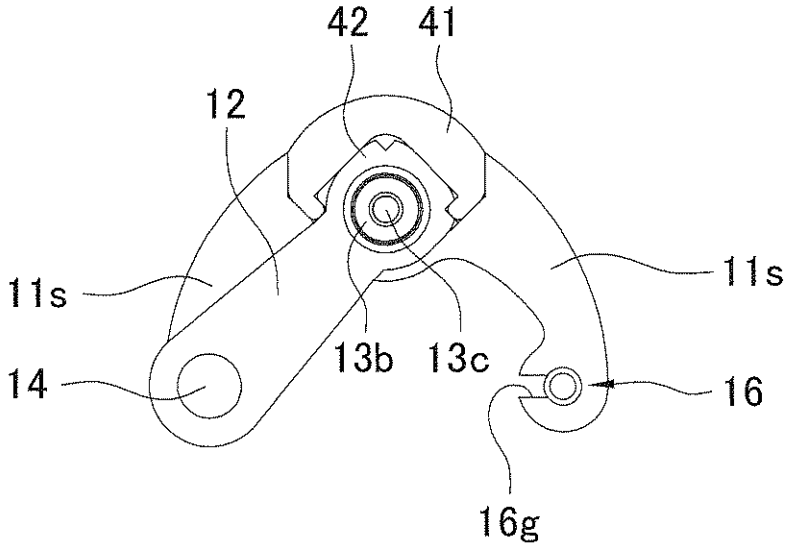
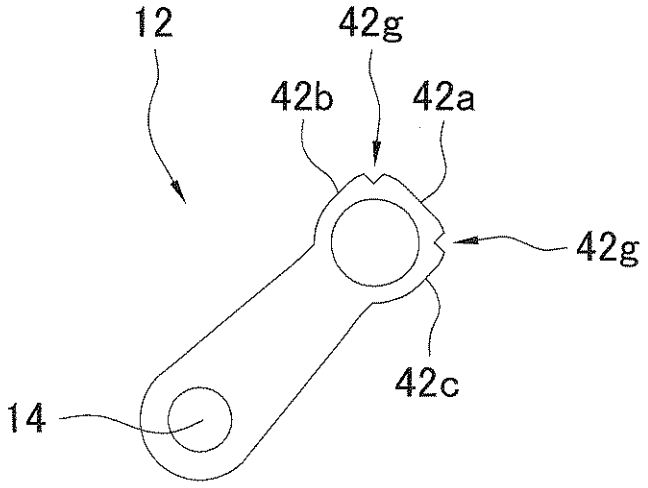

42
41
12
11s
11s
13b
13c
14
16
16g

FIG. 8

(A)



(B)

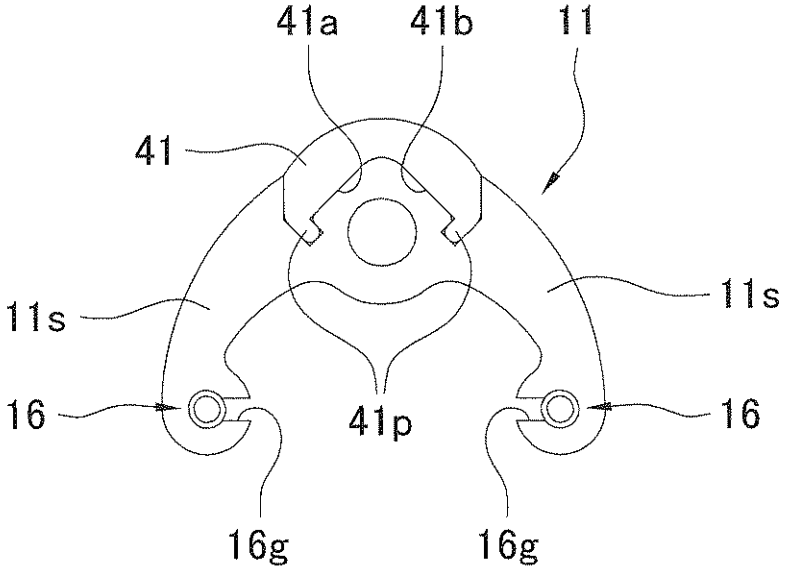
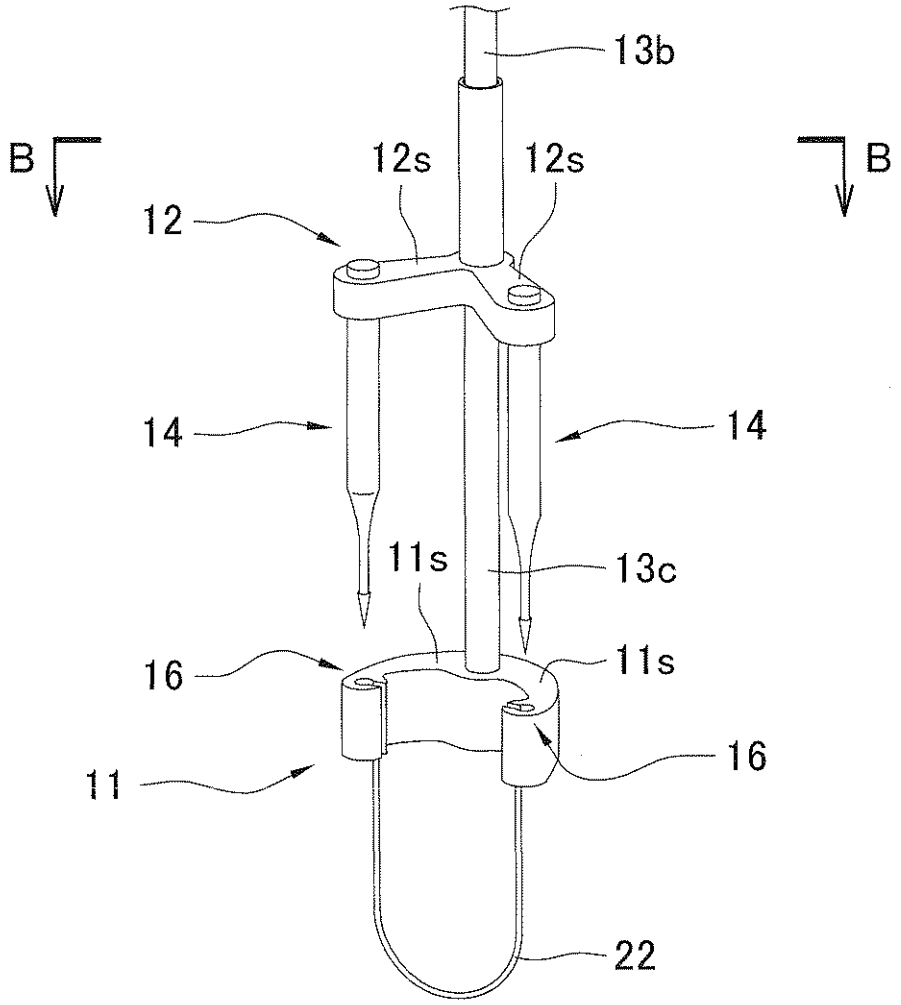


FIG. 9

(A)


13b
B
B
12s
12s
12
14
14
11s
13c
16
11s
16
11
22

(B)

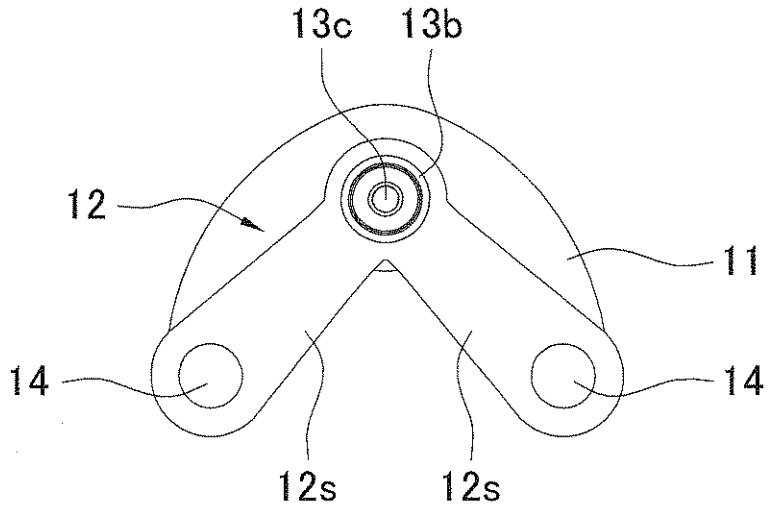

13c
13b
12
11
14
14
12s
12s

FIG. 10

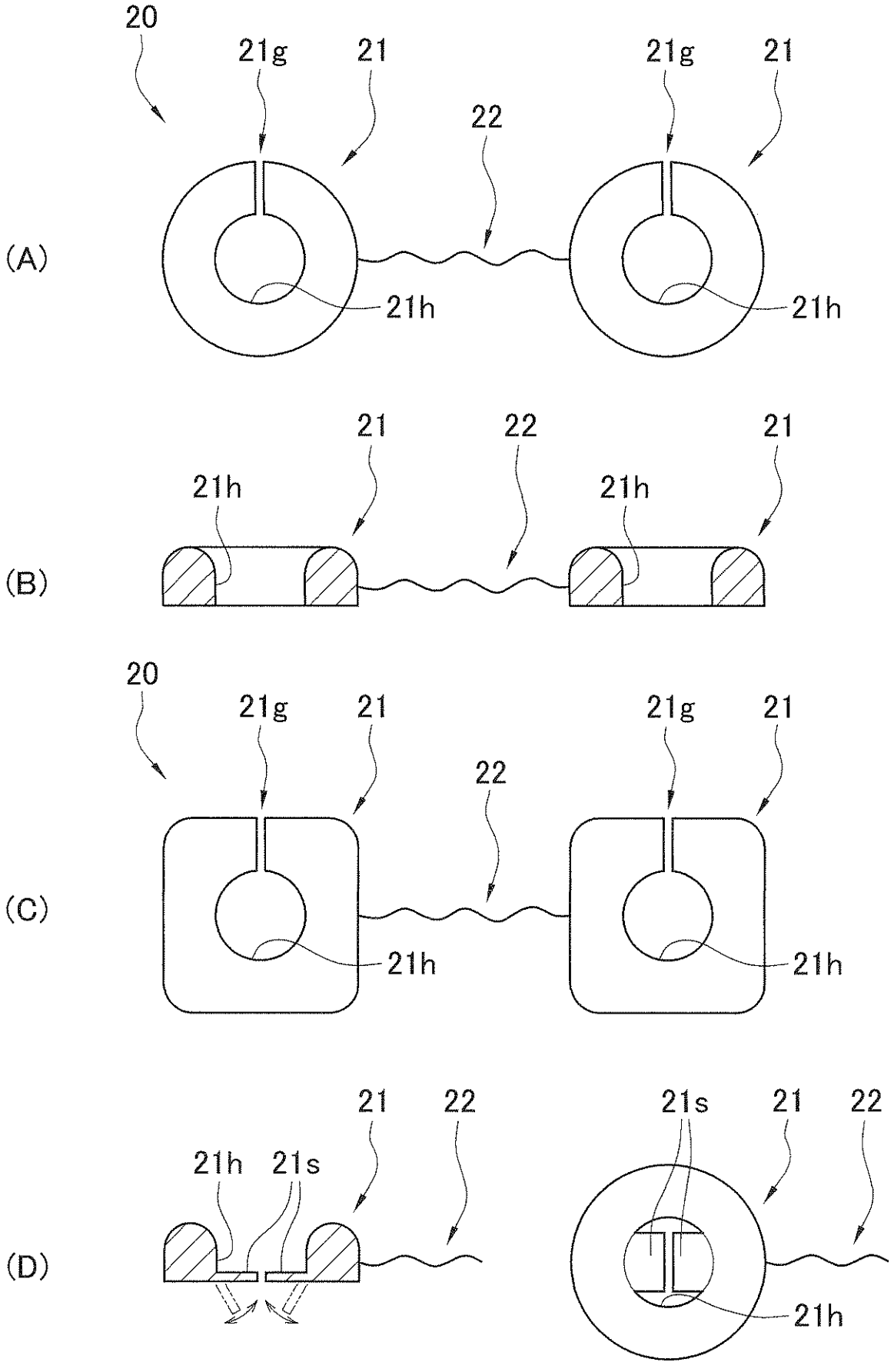
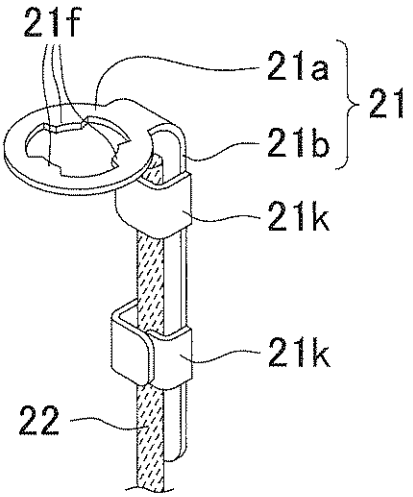
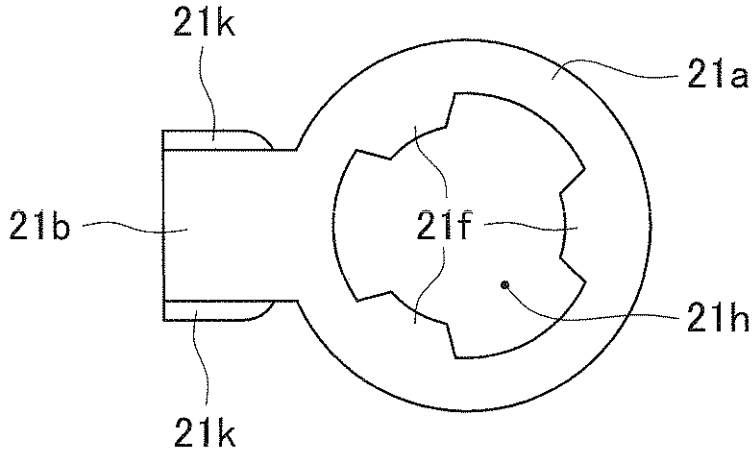

(A)
20
21g
21
22
21g
21
21h
21h
(B)
21
22
21
21h
21h
(C)
20
21g
21
22
21g
21
21h
21h
(D)
21
22
21h
21s
21s
21
22
21h

FIG. 11

(A)


21f
21a
21
21b
21k
21k
22

(B)


21k
21a
21b
21f
21h
21k

(C)

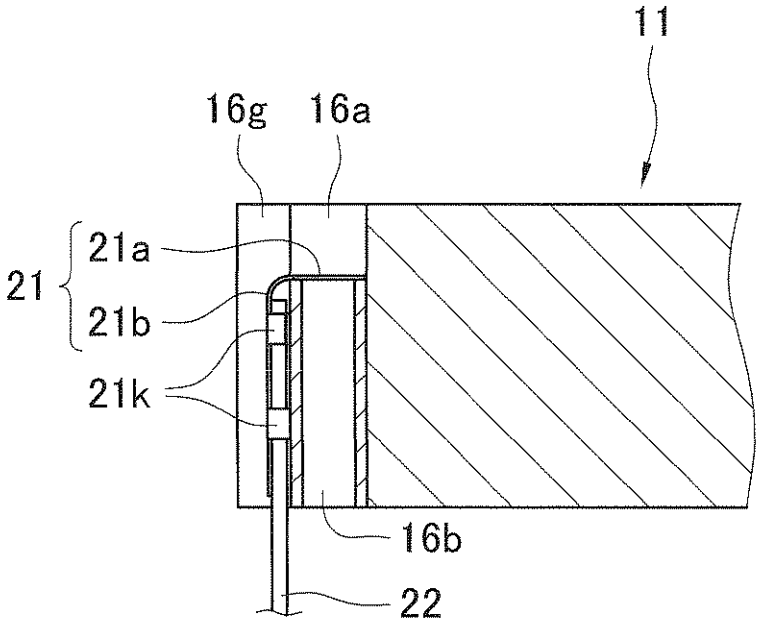

11
16g
16a
21
21a
21b
21k
16b
22

FIG. 12

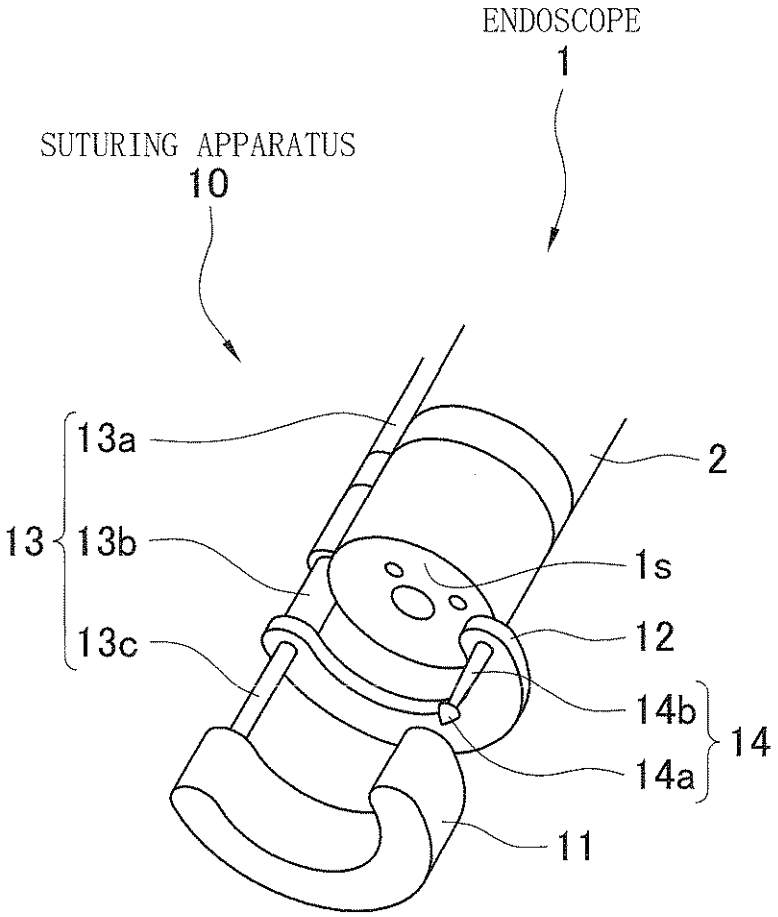

ENDOSCOPE
1
SUTURING APPARATUS
10
13a
13
13b
13c
2
1s
12
14b
14
14a
11

FIG. 13

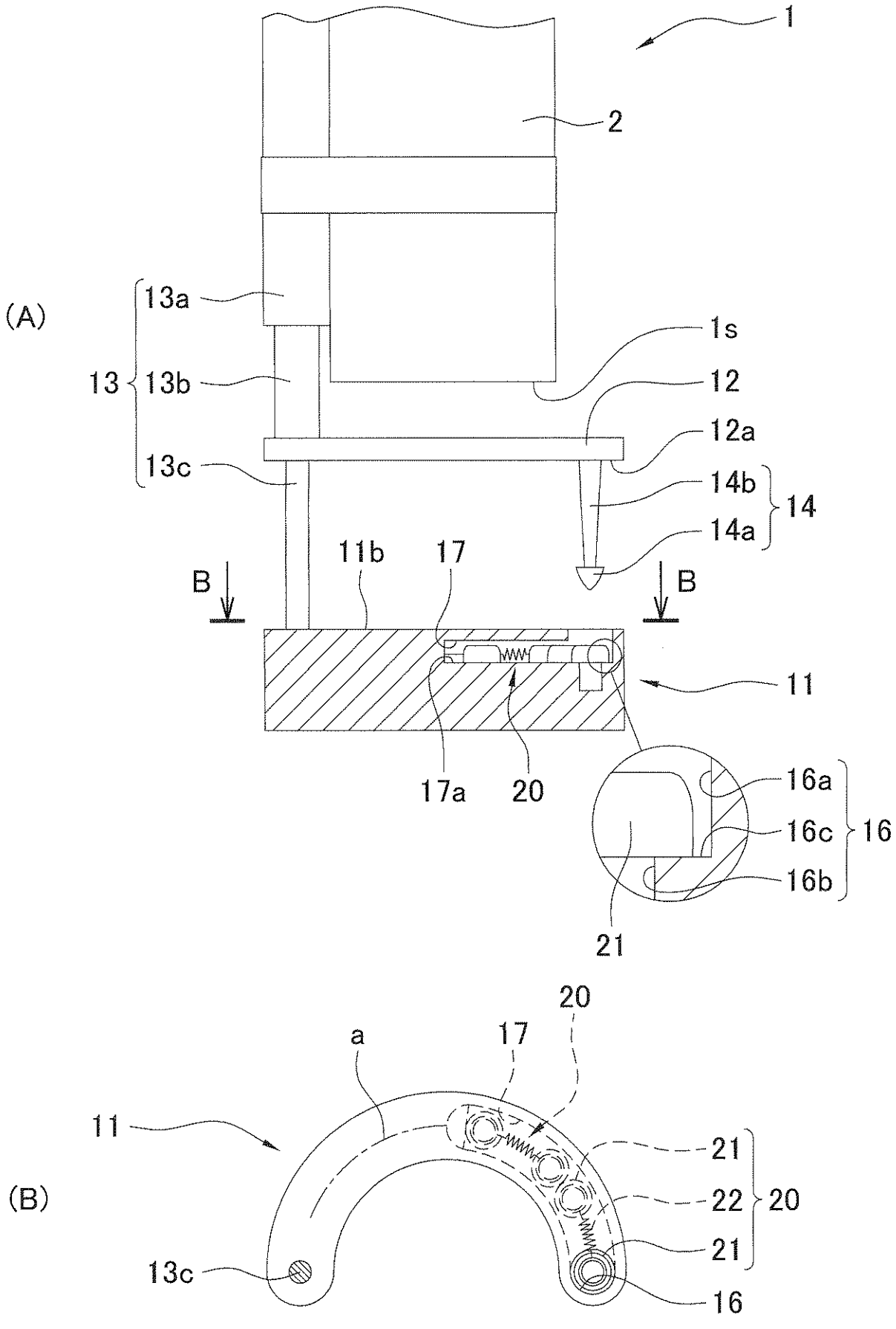
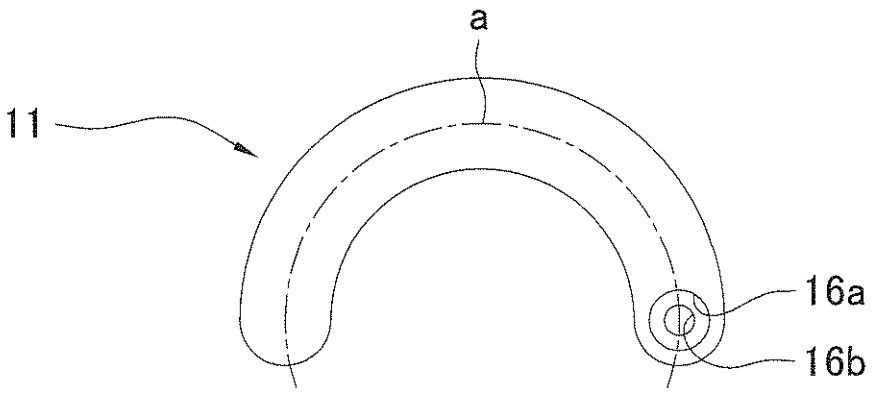
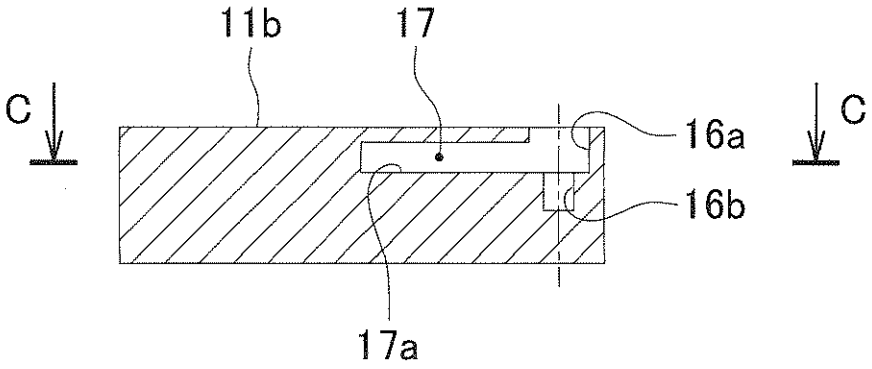

(A)
1
2
13a
13
13b
13c
1s
12
12a
14b
14
14a
11b
17
B
B
11
17a
20
16a
16c
16
16b
21
(B)
11
a
17
20
21
22
20
21
13c
16

FIG. 14

(A)



(B)



(C)

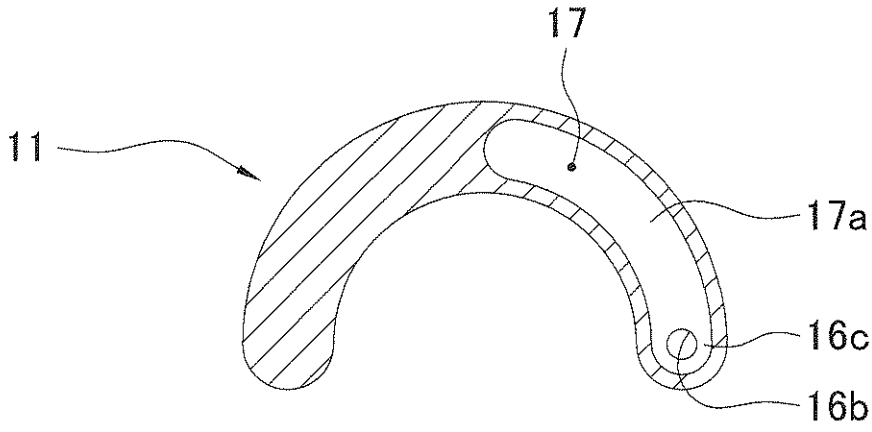


FIG. 15

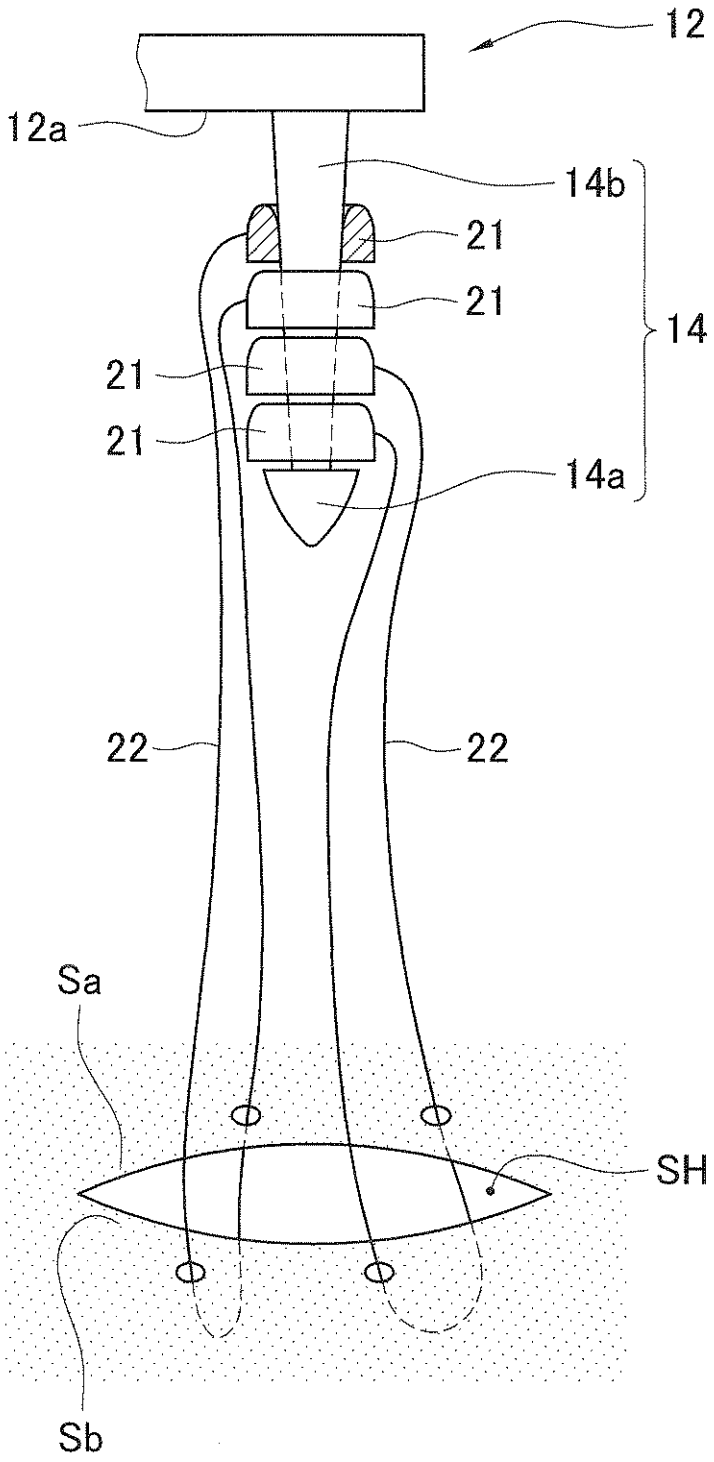
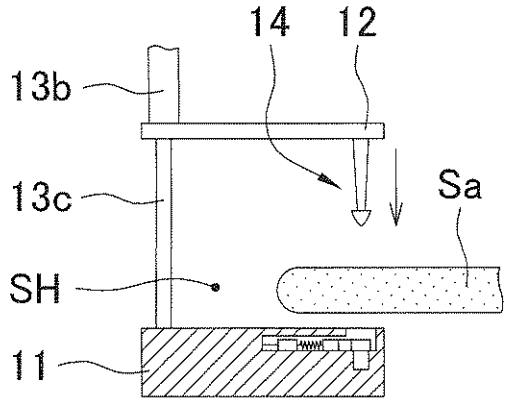
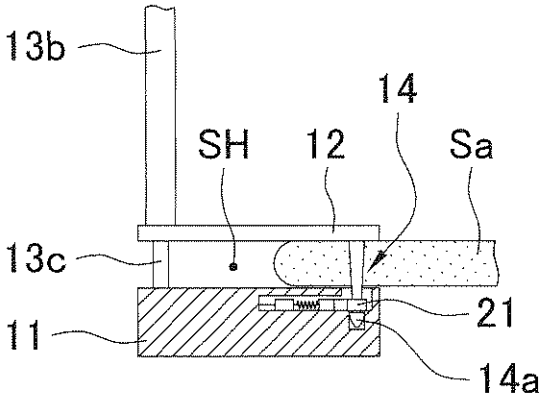


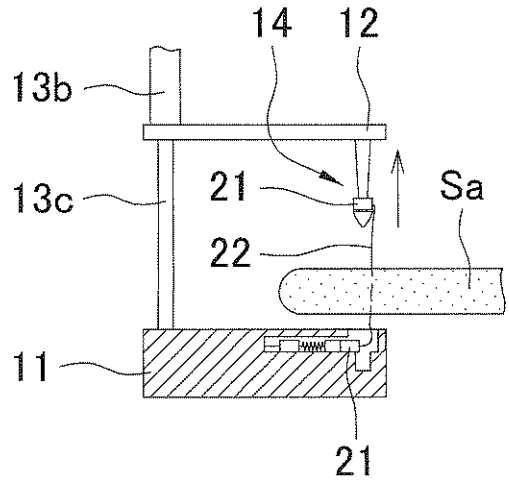
FIG. 16


14
12
13b
13c
Sa
SH
11

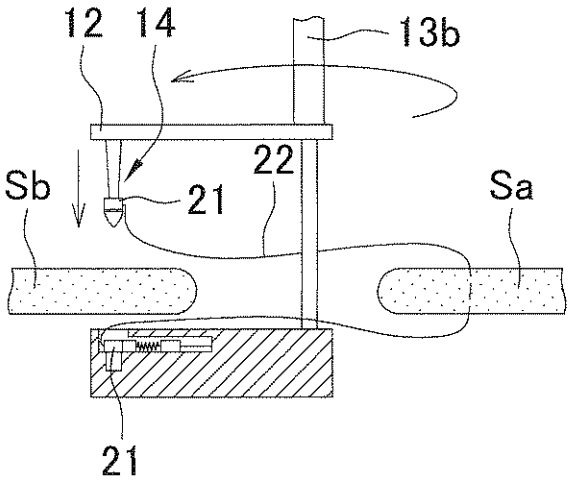
(1)


13b
14
SH
12
Sa
13c
21
11
14a

(2)

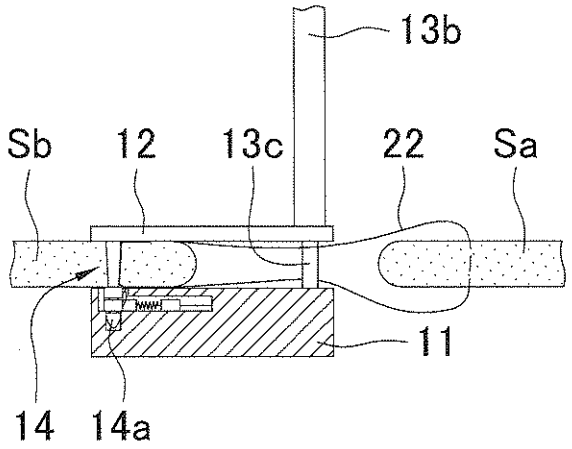

14
12
13b
21
Sa
13c
22
11
21

(3)

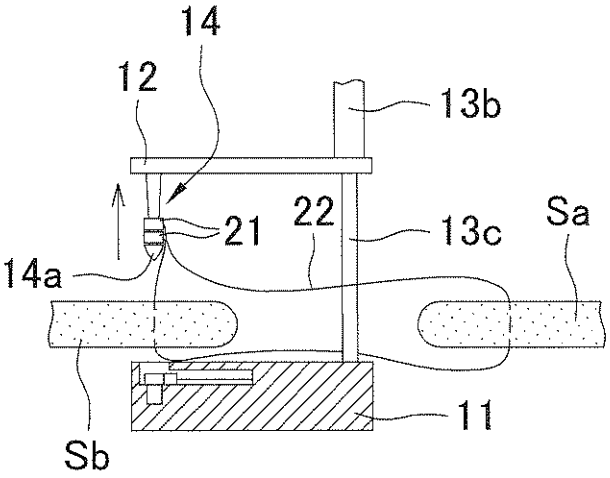

12
14
13b
22
Sb
21
Sa
21

(4)

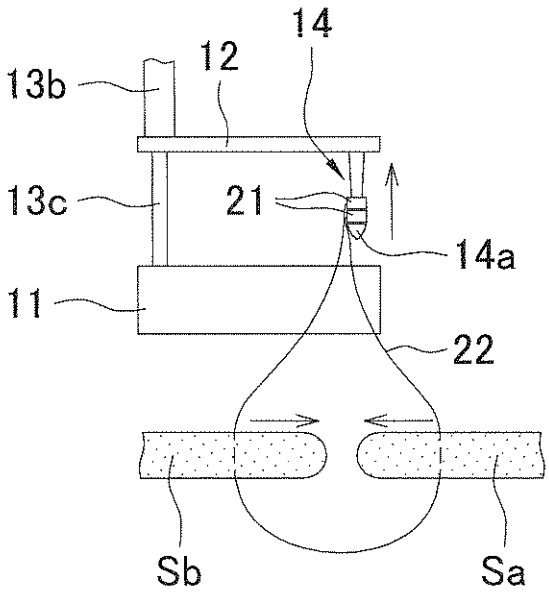
F I G. 1 7


13b
Sb
12
13c
22
Sa
11
14
14a

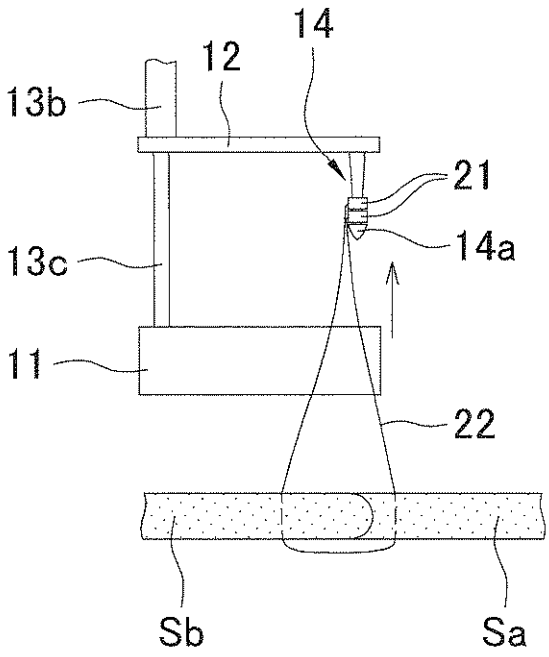
(5)


14
12
13b
21
22
13c
Sa
14a
11
Sb

(6)


13b
12
14
13c
21
14a
11
22
Sb
Sa

(7)


14
12
13b
21
13c
14a
11
22
Sb
Sa

(8)

FIG. 18

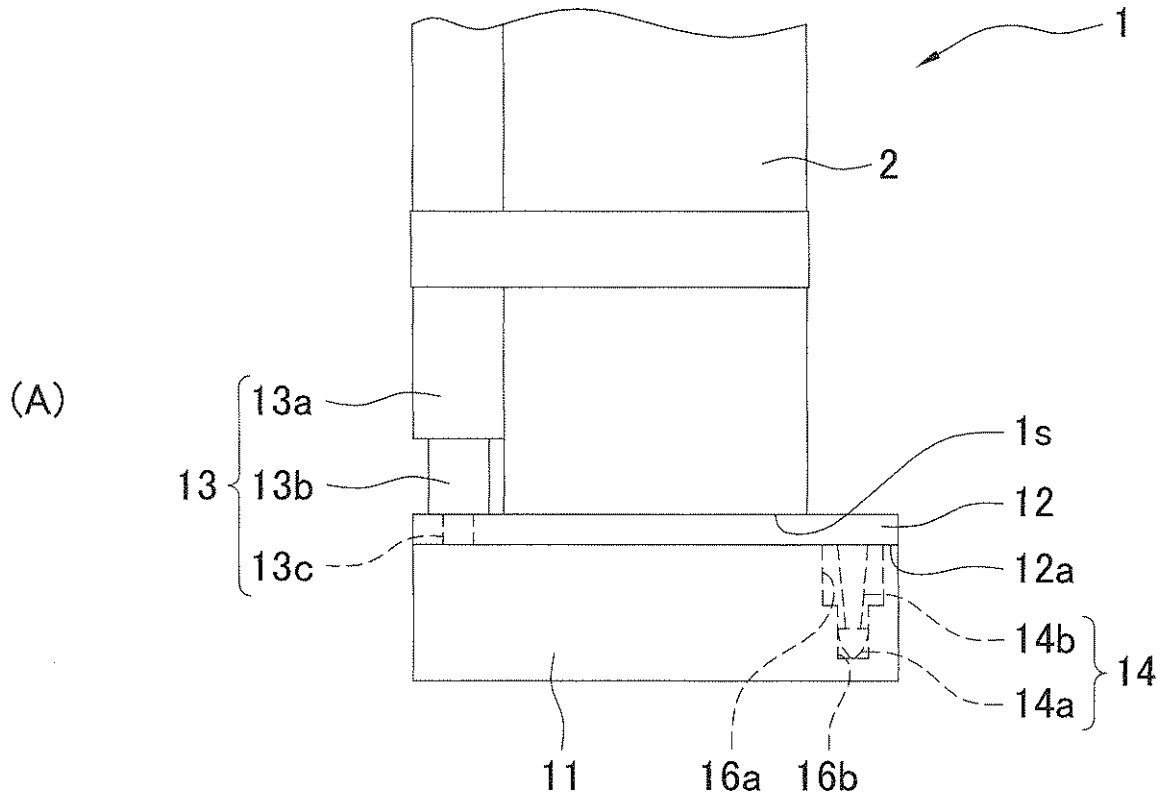


FIG. 19

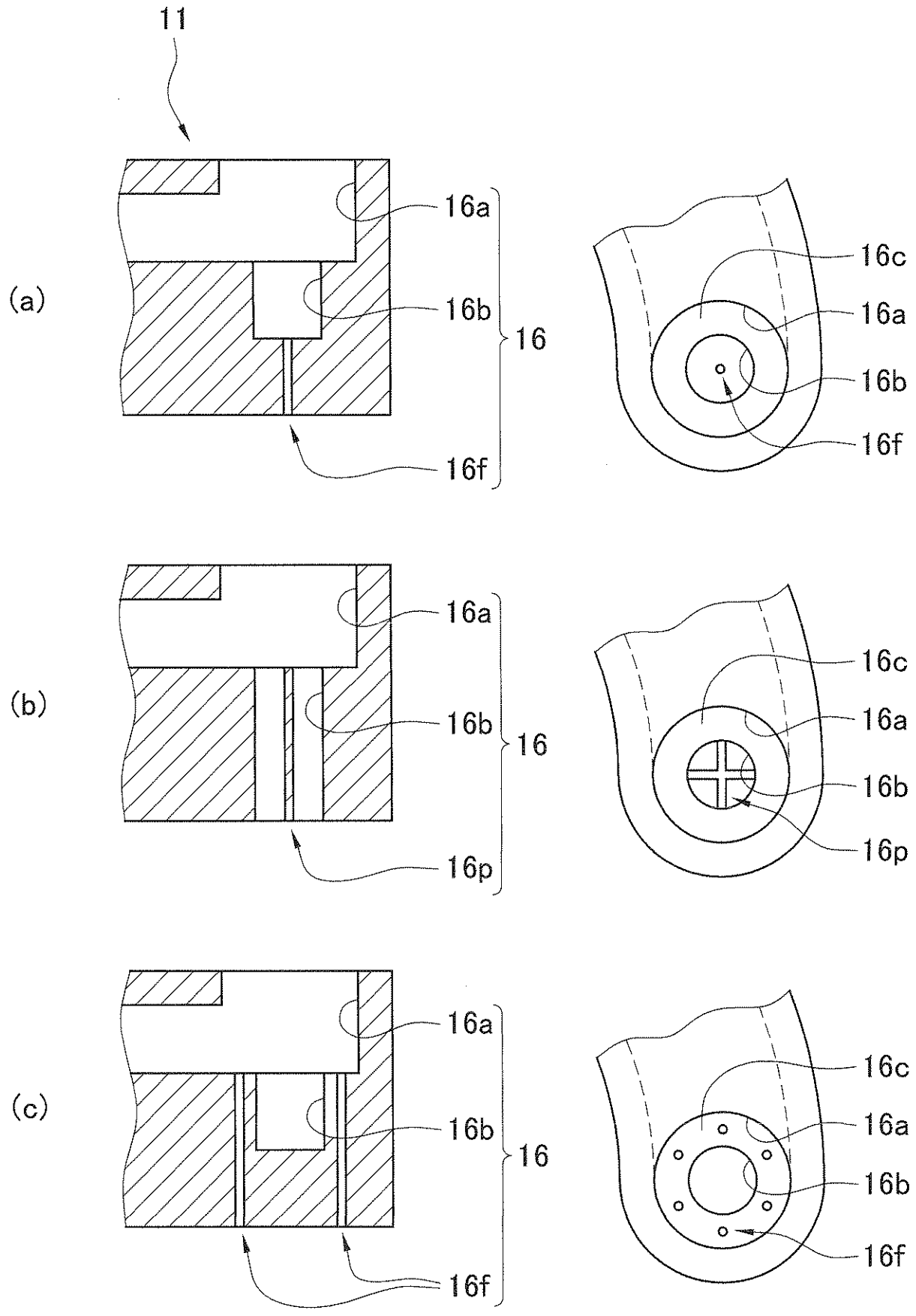

11
(a)
16a
16b
16
16f
16c
16a
16b
16f
(b)
16a
16b
16
16p
16c
16a
16b
16p
(c)
16a
16b
16
16f
16c
16a
16b
16f

FIG. 20

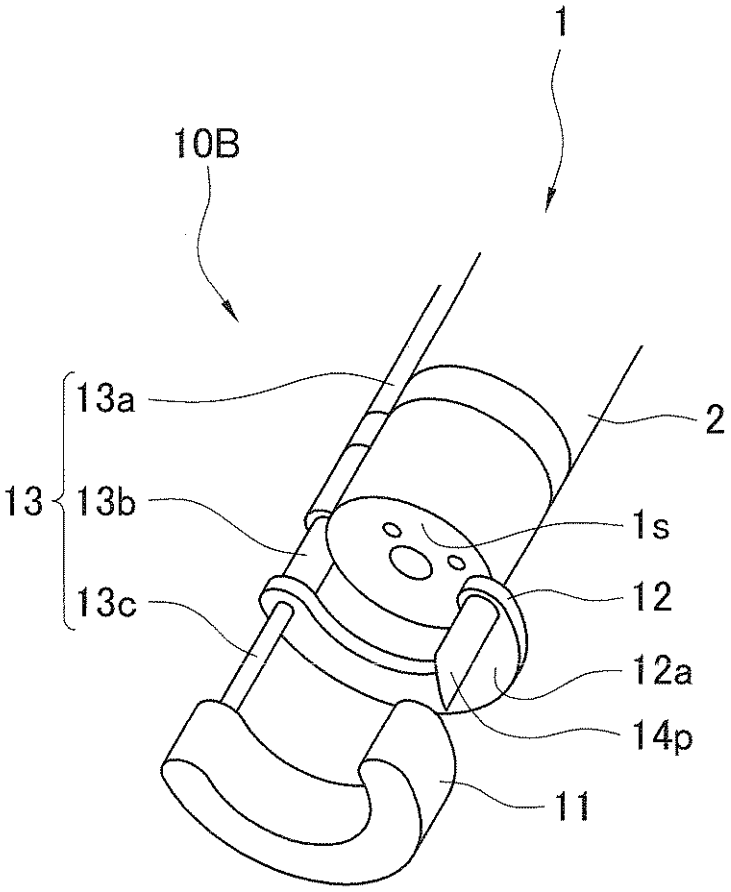


FIG. 21

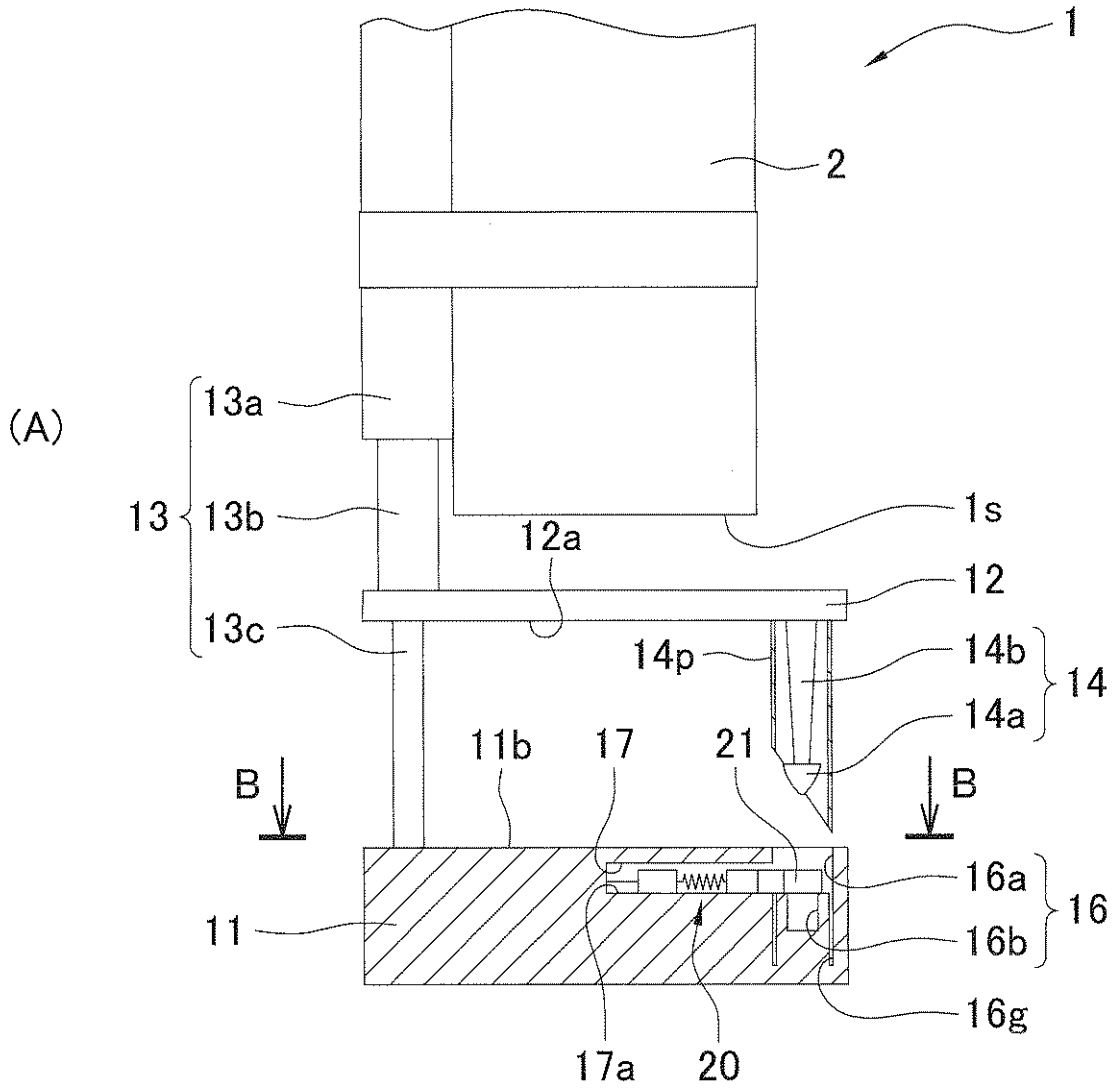

(A)
1
2
13a
13
13b
13c
1s
12a
12
14p
14b
14
14a
11b
17
21
B
B
16a
16
16b
11
16g
17a
20
(B)
20
a
17
11
21
22
20
21
13c
16g
16

FIG. 22

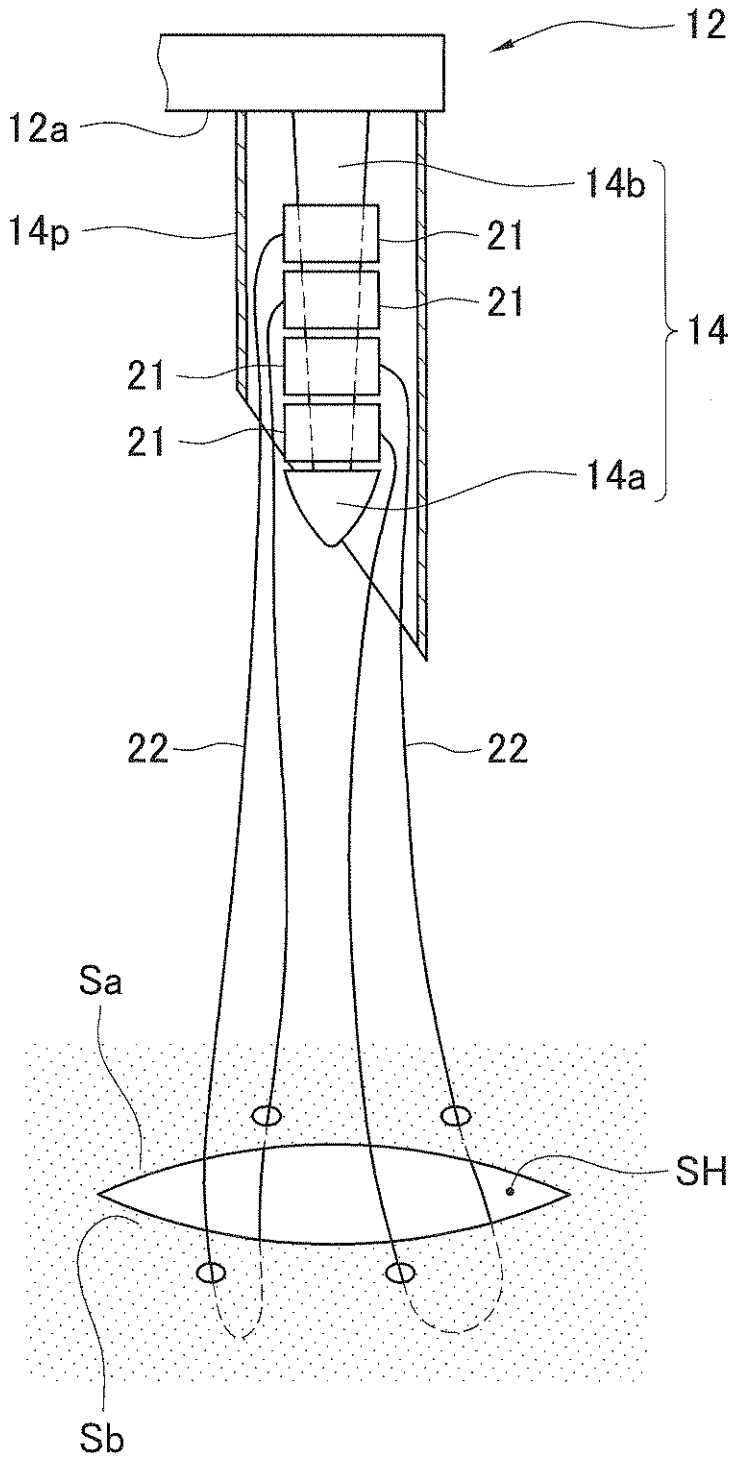


FIG. 23

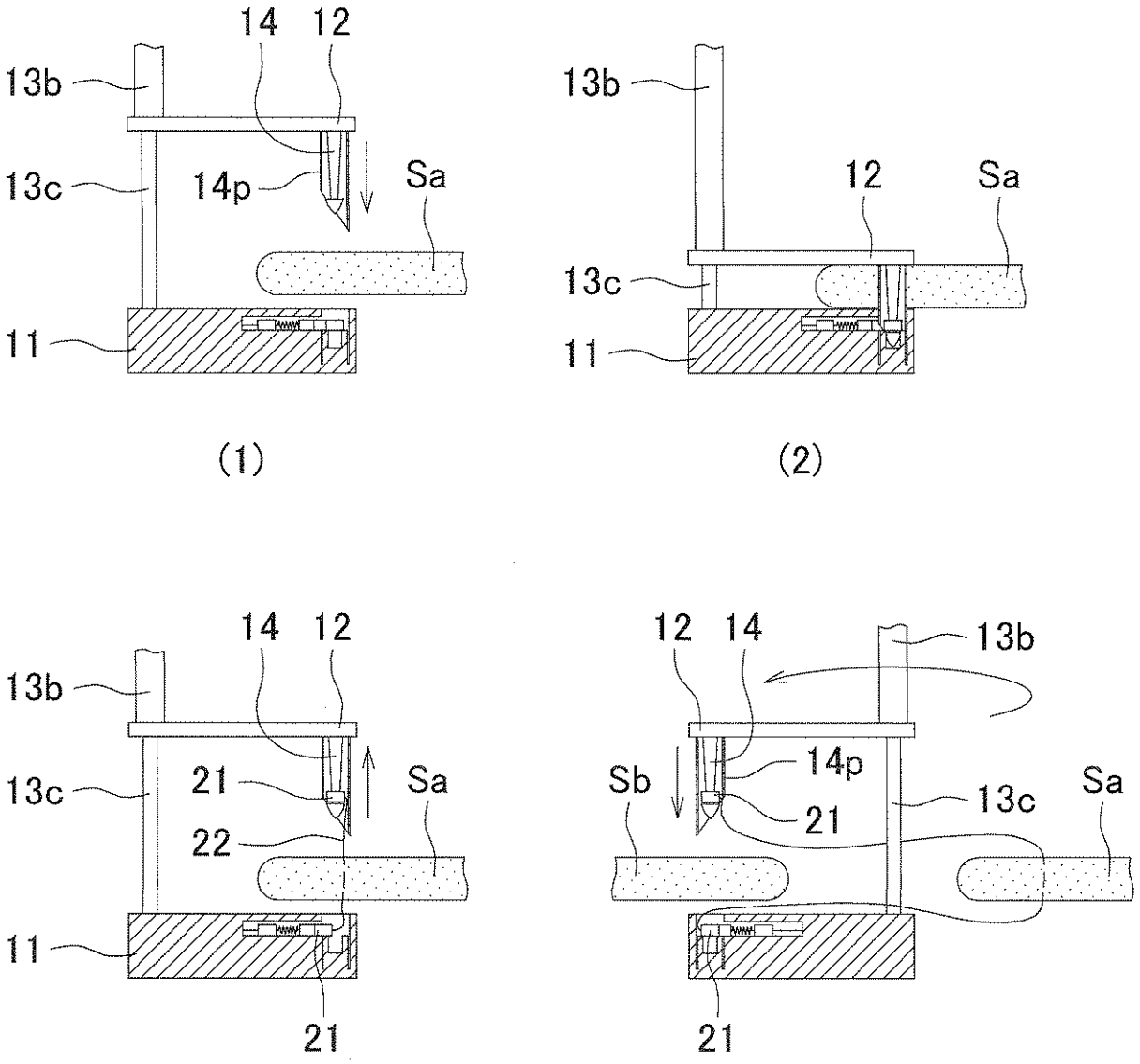
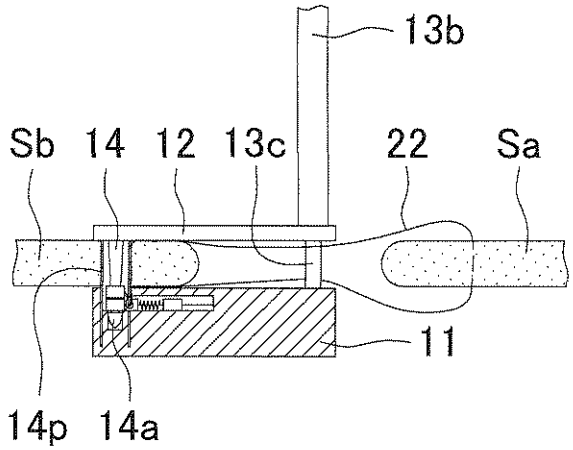
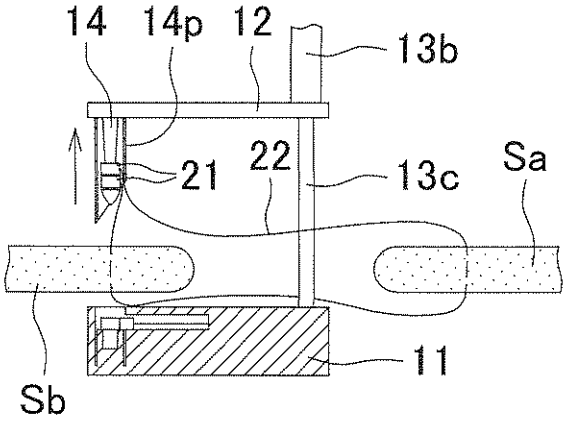

14
12
13b
13c
14p
Sa
11
(1)
13b
12
Sa
13c
11
(2)
14
12
13b
13c
21
Sa
22
11
21
(3)
12
14
13b
Sb
14p
21
13c
Sa
21
(4)

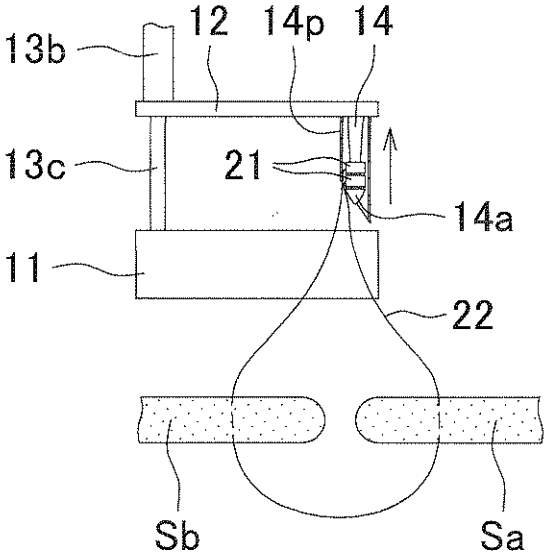
FIG. 24


13b
Sb
14
12
13c
22
Sa
11
14p
14a

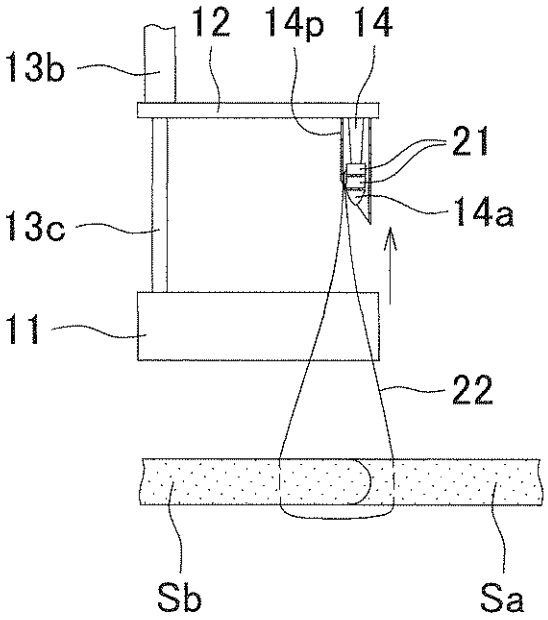
(5)


14
14p
12
13b
21
22
13c
Sa
11
Sb

(6)


13b
12
14p
14
13c
21
14a
11
22
Sb
Sa

(7)


12
14p
14
13b
21
13c
14a
11
22
Sb
Sa

(8)

FIG. 25

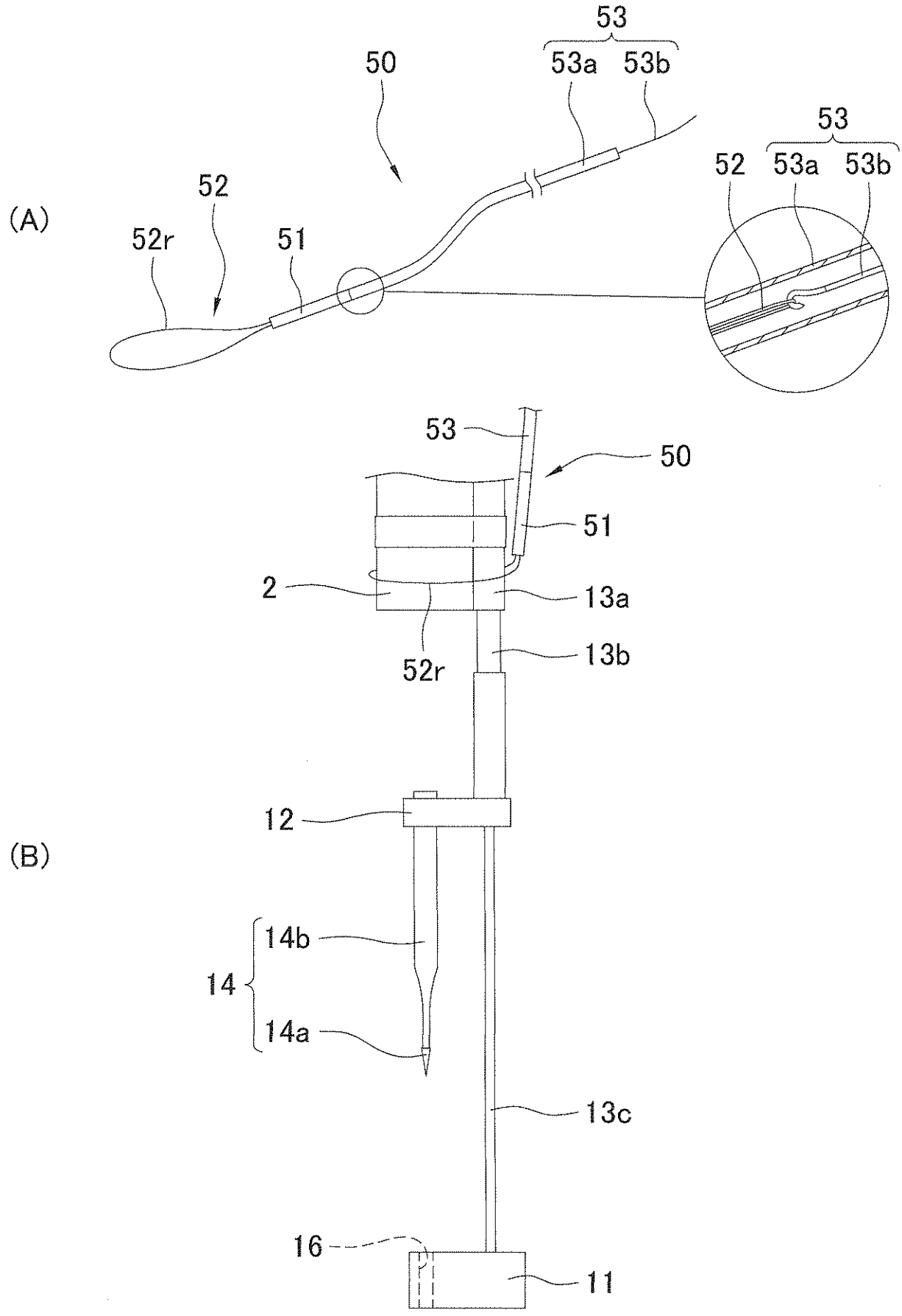
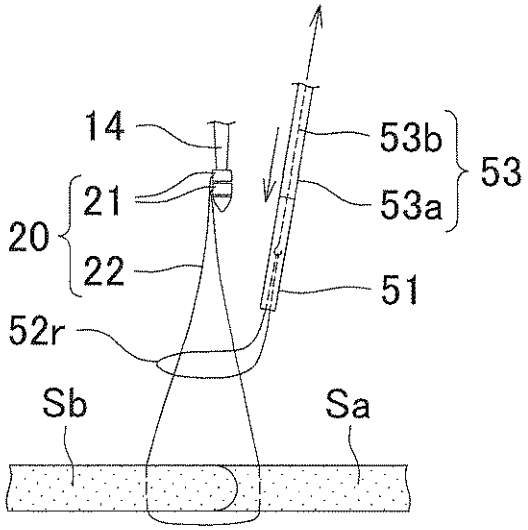
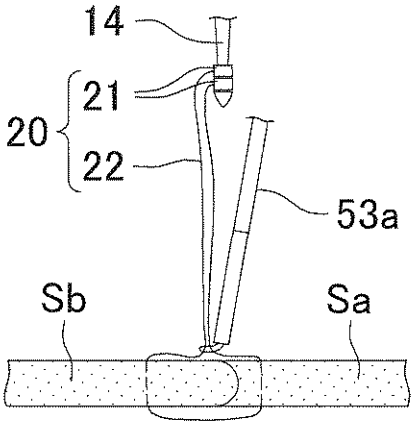

(A)
53
53a
53b
50
52
52r
51
53
52
53a
53b
(B)
53
50
51
2
13a
52r
13b
12
14b
14
14a
13c
16
11

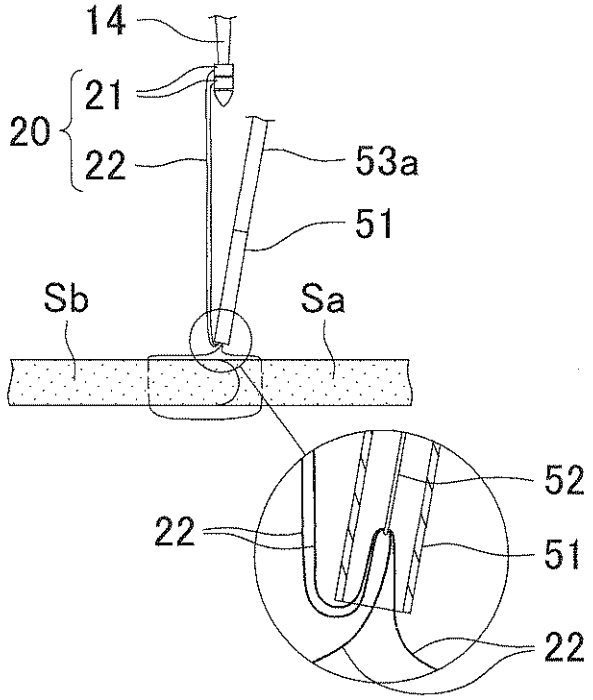
FIG. 26


14
53b
53
21
53a
20
22
51
52r
Sb
Sa

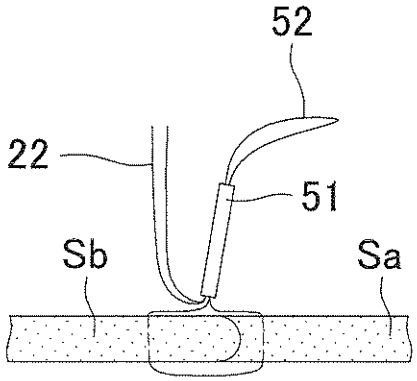
(A)


14
21
20
22
53a
Sb
Sa

(B)


14
21
20
22
53a
51
Sb
Sa
52
22
51
22

(C)


52
22
51
Sb
Sa

(D)

F I G. 2 7

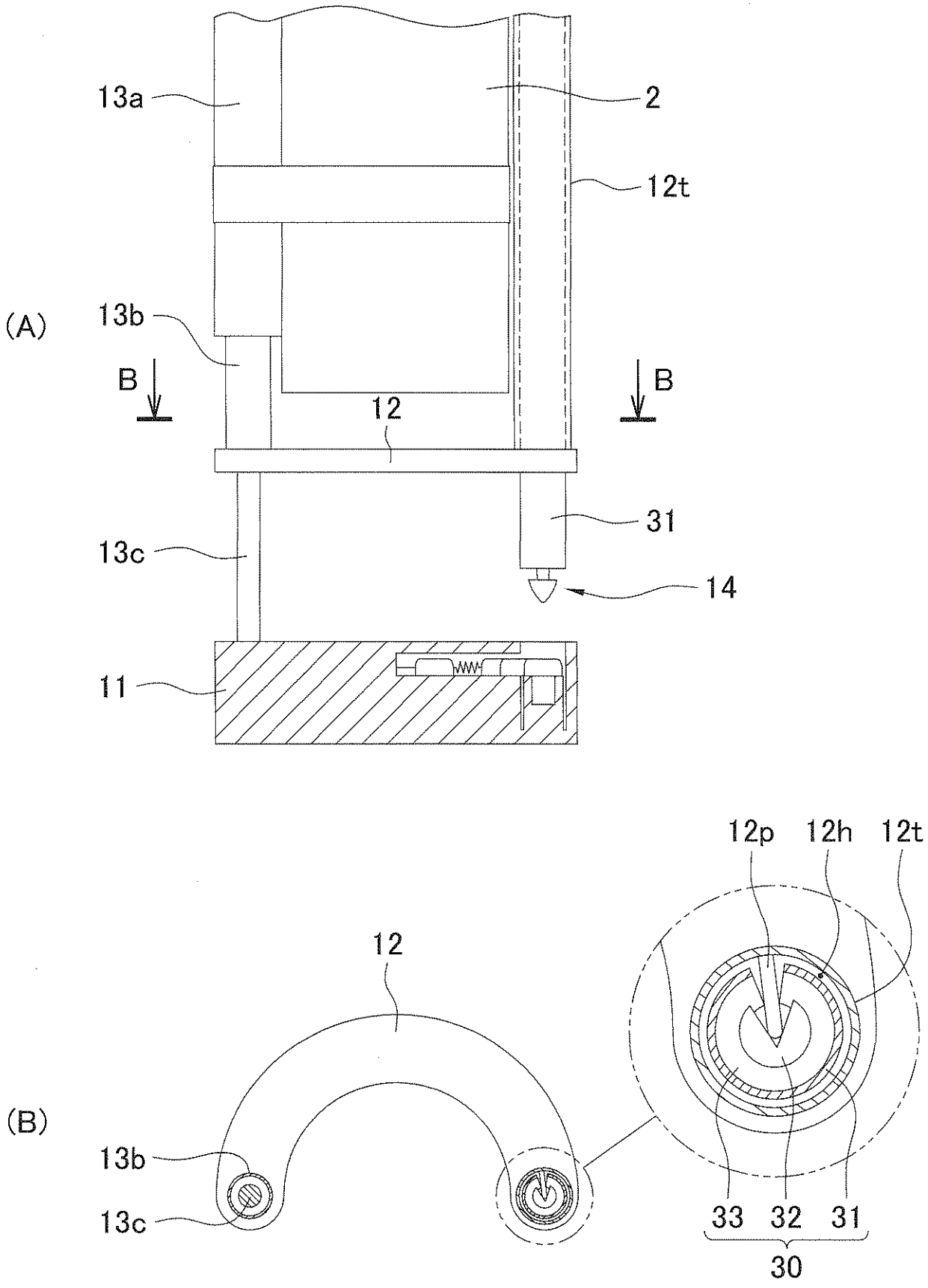

(A)
13a
2
12t
13b
B
B
12
31
13c
14
11
(B)
12p
12h
12t
12
13b
13c
33
32
31
30

FIG. 28

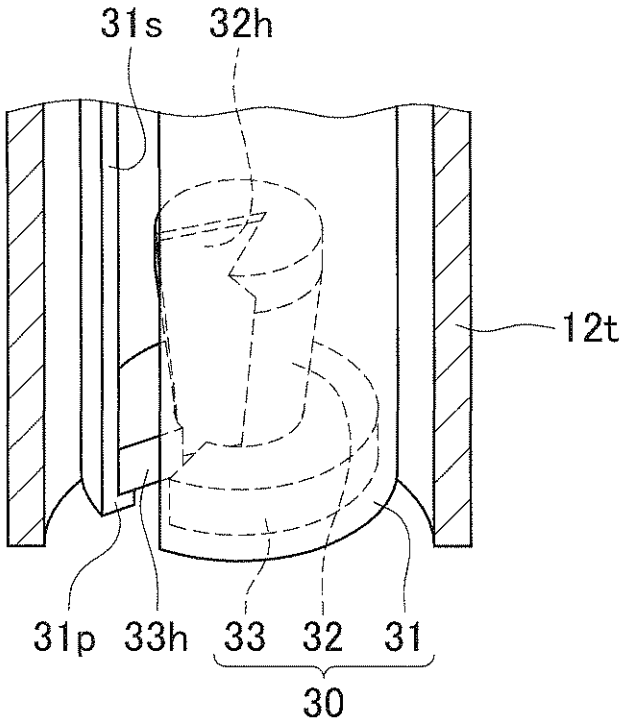
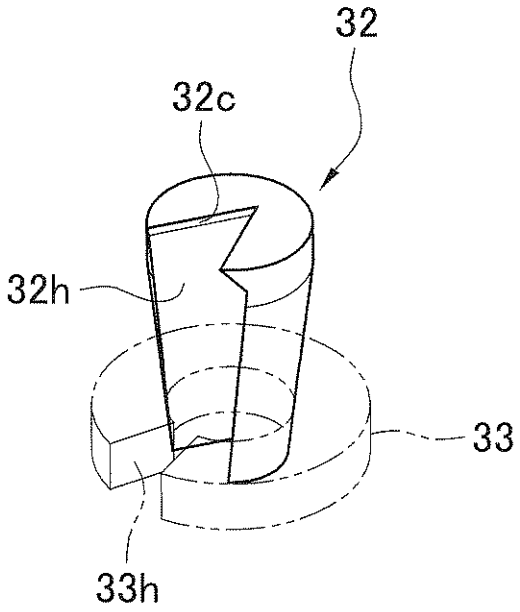
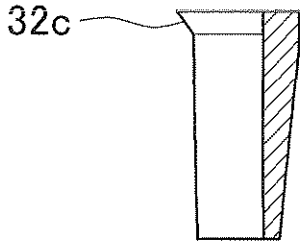


FIG. 29

(A)



(B)



(C)

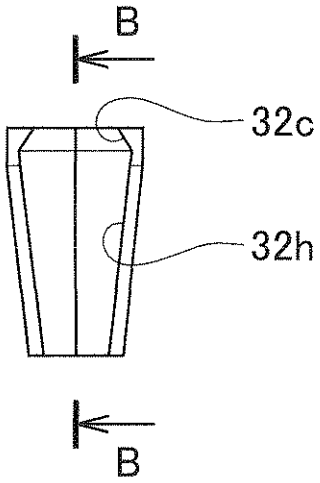


FIG. 30

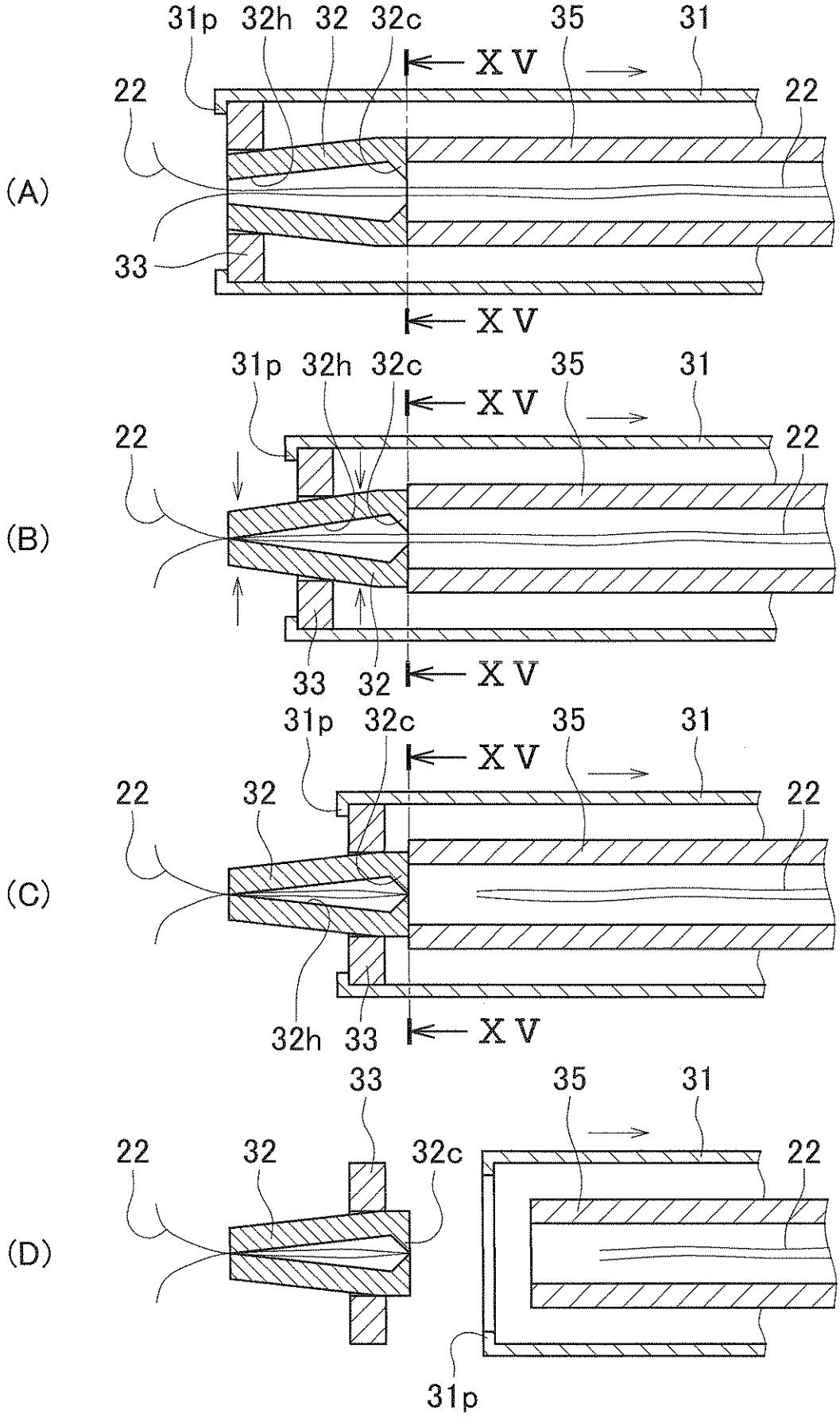
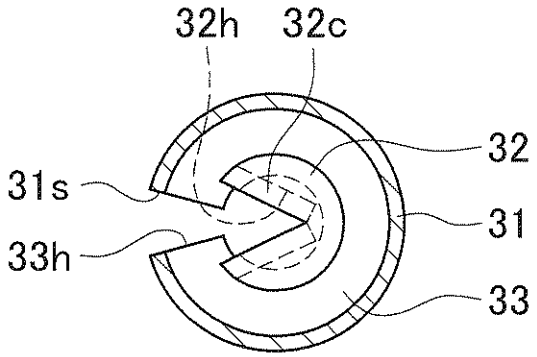
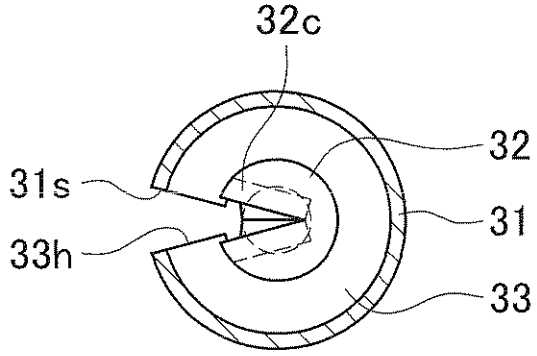

(A)
31p
32h
32
32c
35
31
XV
22
22
33
XV
(B)
31p
32h
32c
35
31
XV
22
22
33
32
XV
(C)
31p
32c
35
31
XV
22
32
22
32h
33
XV
(D)
33
35
31
22
32
32c
22
31p

FIG. 31

(A)



(B)



(C)

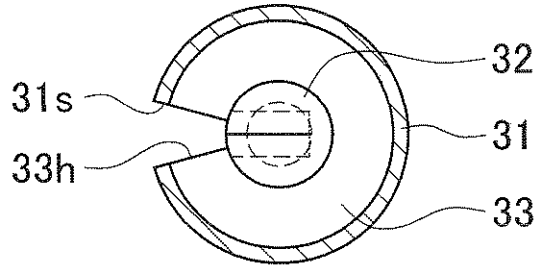


FIG. 32

