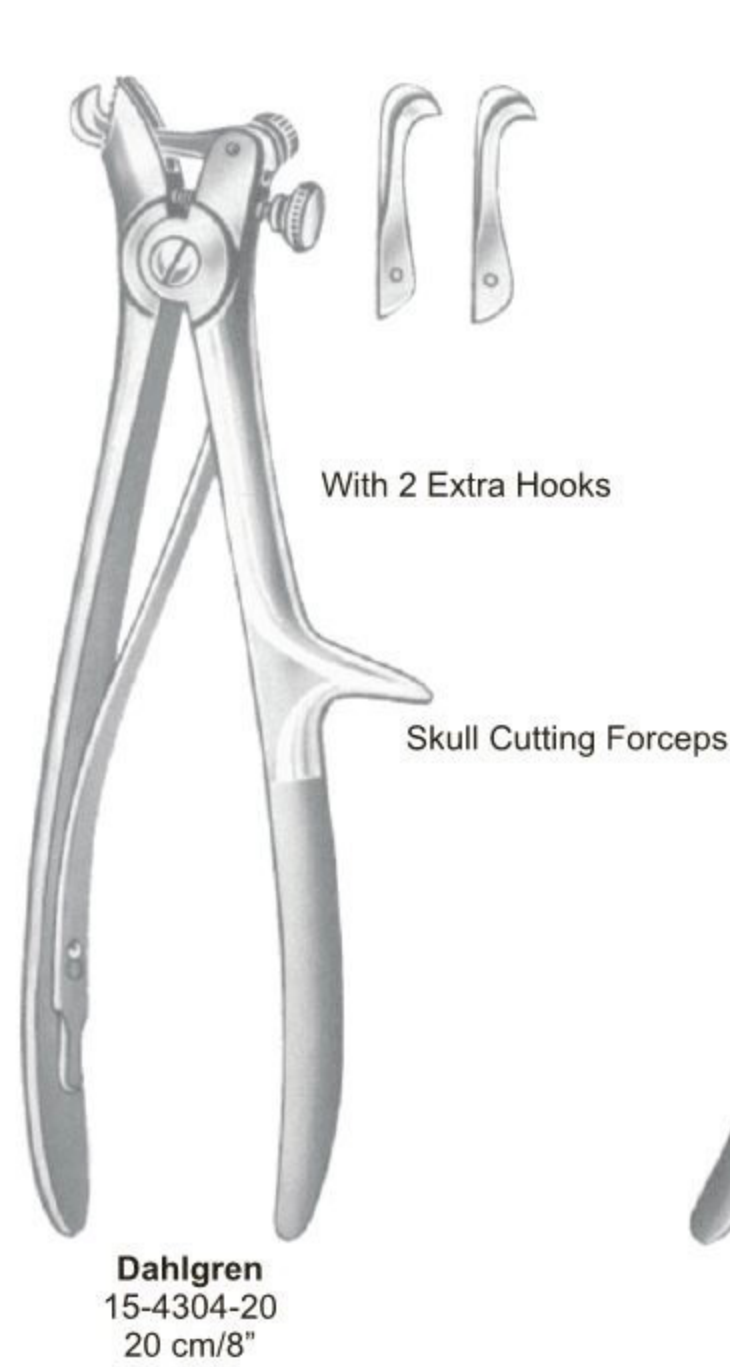


**Rukson**  
SURGICAL INSTRUMENTS  
QUALITY YOU DESIRE

- EN** Neurosurgery
- DE** Neurochirurgie
- ES** Neuro Cirugía

**Page 358 to 388**





Cervical Traction Tongs ● EN  
 Schädelhalter ● DE  
 Pinzas de tracción craneal ● ES



**Crutchfield**  
 15-4306-00



**Crutchfield**  
 15-4307-00



15-4308-00



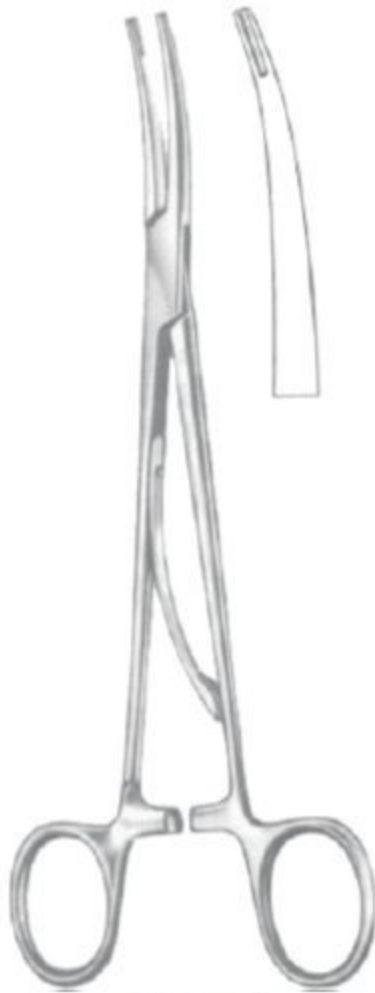
**Crutchfield**  
 15-4309-00  
 Complete With 2 Drills



Applying and Removing Forceps



**Raney**  
 15-4310-00  
 16 cm/6¼"



**McKenzie**  
 15-4311-15 15 cm/6"  
 15-4311-19 19 cm/7½"



**Olivecrona-Tonnis**  
 15-4312-14



Retractor Only  
 15-4313-01  
 15 cm/6"

**Caspar**  
 15-4313-00

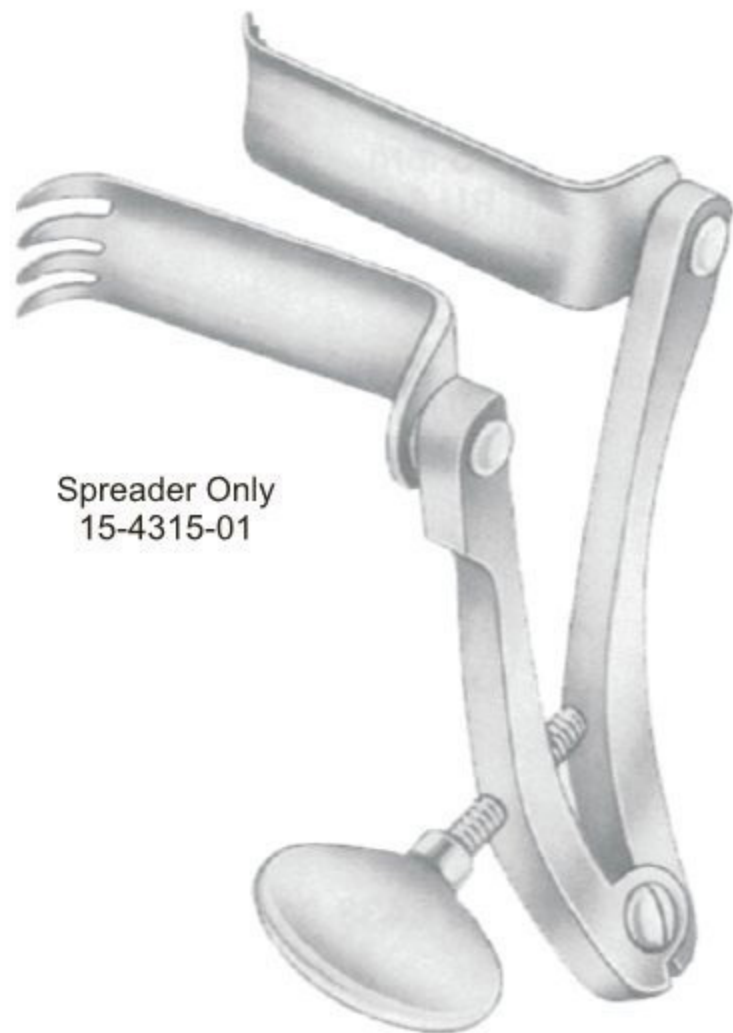
Retractor Complete With  
 1 Blade Each  
 15-4313-40  
 15-4313-50



Retractor Only  
 15-4314-01  
 12 cm/4¾"

**Caspar**  
 15-4314-00

Retractor Complete With  
 1 Blade Each  
 15-4314-40  
 15-4314-50



Spreader Only  
 15-4315-01

**Caspar**  
 15-4315-00  
 Retractors Only  
 Spreader Complete With  
 1 Blade Each  
 15-4315-45  
 15-4315-60



Spreader Only  
 15-4316-01

**Caspar**  
 15-4316-00  
 Spreader Only  
 Retractor Complete With  
 1 Blade Each  
 15-4316-40  
 15-4316-60

15-4317-01  
 15 cm/6"  
 Retractor only

**Caspar**  
 15-4317-00  
 15-4317-45  
 15-4317-65  
 Retractor complete with  
 1 blade each



15-4318-01  
 15 cm/6"  
 Retractor only

**Caspar**  
 15-4318-00  
 15-4318-45  
 15-4318-65  
 Retractor adjustable, con  
 1 blade each



15-4319-01  
 Retractor only  
 with 1 fixed blade

**Caspar**  
 15-4319-00  
 Retractor complete,  
 eith 5 blades

15-4319-40  
 40 mm



15-4319-45  
 45 mm



15-4319-50  
 50 mm



15-4319-55  
 55 mm



15-4319-60  
 60 mm

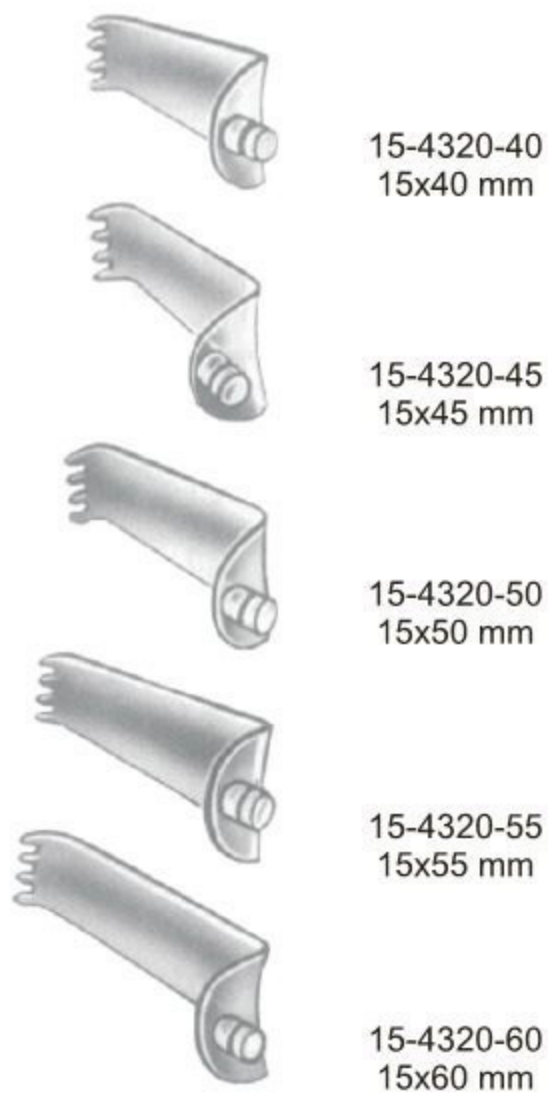






15-4320-01  
 Retractor only

**Cloward**  
 15-4320-00  
 25 cm/10"  
 complete with 5 blades



15-4320-40  
 15x40 mm

15-4320-45  
 15x45 mm

15-4320-50  
 15x50 mm

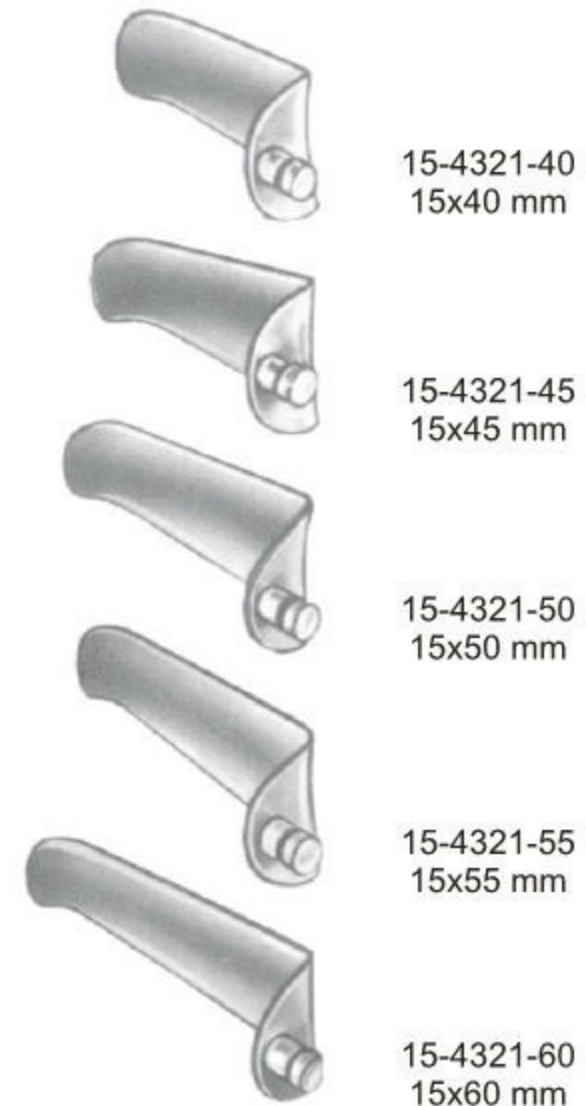
15-4320-55  
 15x55 mm

15-4320-60  
 15x60 mm



15-4321-01  
 Retractor only

**Cloward**  
 15-4321-00  
 15 cm/6"  
 complete with 5 blades



15-4321-40  
 15x40 mm

15-4321-45  
 15x45 mm

15-4321-50  
 15x50 mm

15-4321-55  
 15x55 mm

15-4321-60  
 15x60 mm



**Inge**  
 15-4322-16  
 16 cm/6 1/4"



**Inge**  
 15-4323-25  
 27 cm/10 3/4"



**Cloward**  
 15-4324-15  
 15 cm/6"



**Cloward**  
 15-4325-16  
 16 cm/6 1/4"



Muscle blades



Frame  
 15-4326-01

**Hey**  
 15-4327-00  
 15-4328-00  
 23 cm/9"



15-4329-50  
 20x50 mm



15-4329-60  
 20x60 mm



15-4329-70  
 20x70 mm

Vertebra-pins



15-4330-50  
 50 mm



15-4330-60  
 60 mm



15-4330-70  
 70 mm



Left-type

Right-type

50x10 mm

15-4331-01

15-4332-01

60x10 mm

15-4331-02

15-4332-02

70x10 mm

15-4331-03

15-4332-03

50x20 mm

15-4333-01

15-4334-01

60x20 mm

15-4333-02

15-4334-02

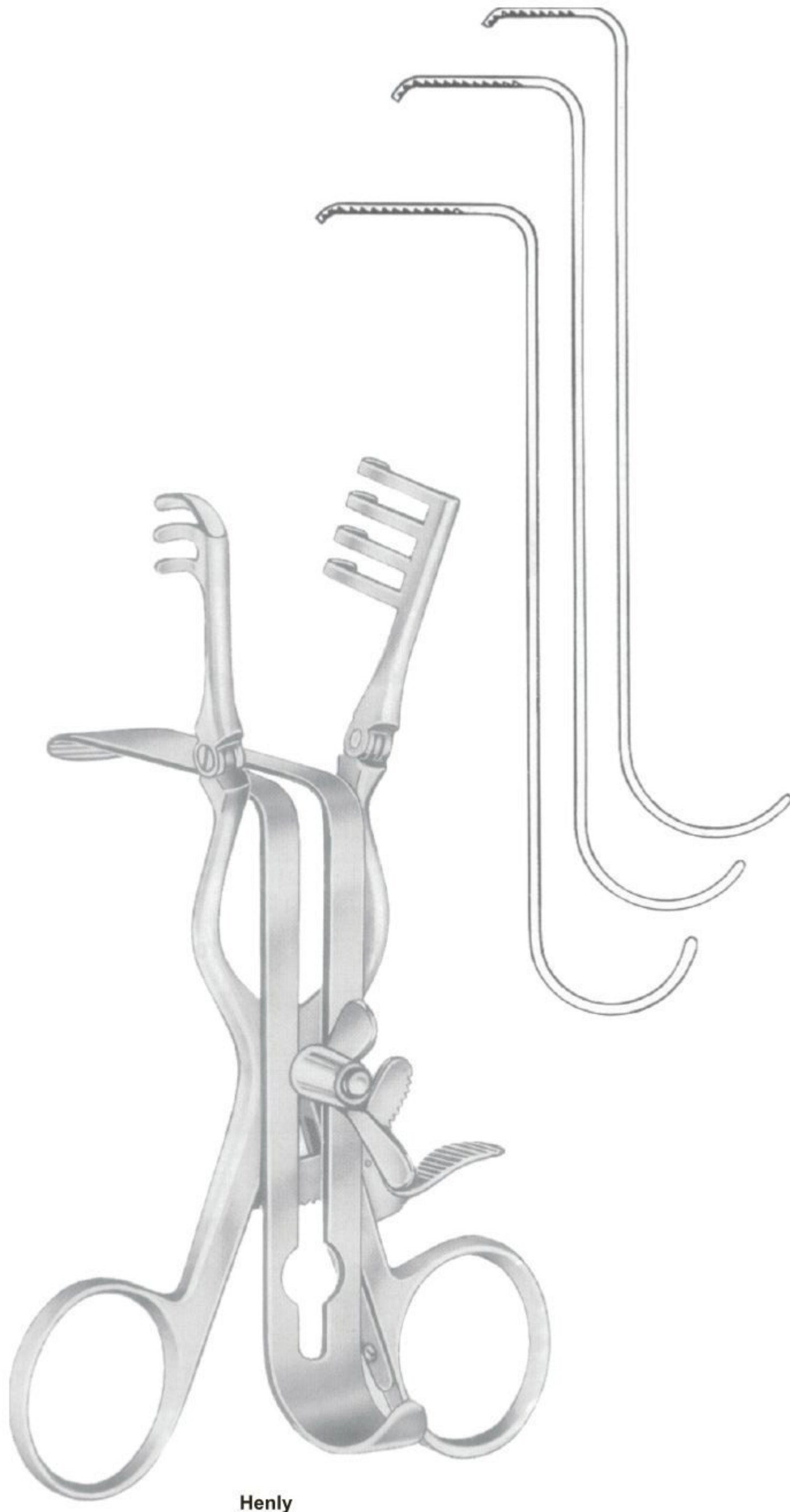
70x20 mm

15-4333-03

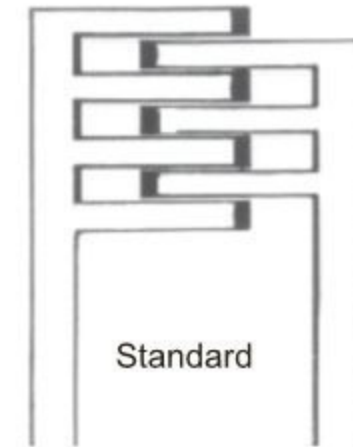
15-4334-03



Muscle Retractors ● EN  
 Muscle Retraktoren ● DE  
 Los retractores del músculo ● ES



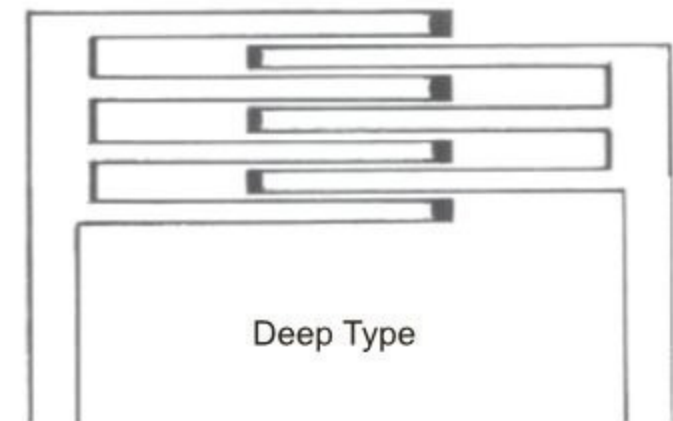
Henly



Standard

15-4335-00 Complete 15-4336-00  
 14.5 cm/5¾" Consisting of 17 cm/6¾"

15-4335-01 Frame 15-4336-01  
 15-4335-21 Centre Blades 15-4336-21  
 15-4335-22 15-4336-22  
 15-4335-23 15-4336-23



Deep Type

15-4337-00 Complete 15-4338-00  
 14.5 cm/5¾" Consisting of 17 cm/6¾"

15-4337-01 Centre Blades 15-4338-01  
 15-4337-21 15-4338-21  
 15-4337-22 15-4338-22  
 15-4337-23 15-4338-23



- EN —● Dura Dissectors and Elevators
- DE —● Dura-Dissektoren, Elevatoren
- ES —● Disecadores para dura-madre, Elevadores



**Davis**  
 15-4339-24  
 24.5 cm/9 3/4"



**Toennis**  
 15-4340-25  
 25 cm/10"



**Frazier**  
 15-4341-15



**Hoer**  
 15-4342-15

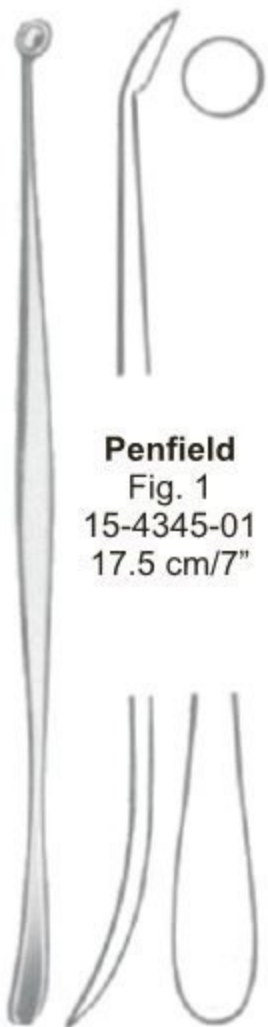


**Hoer**  
 15-4343-15

15 cm/6"



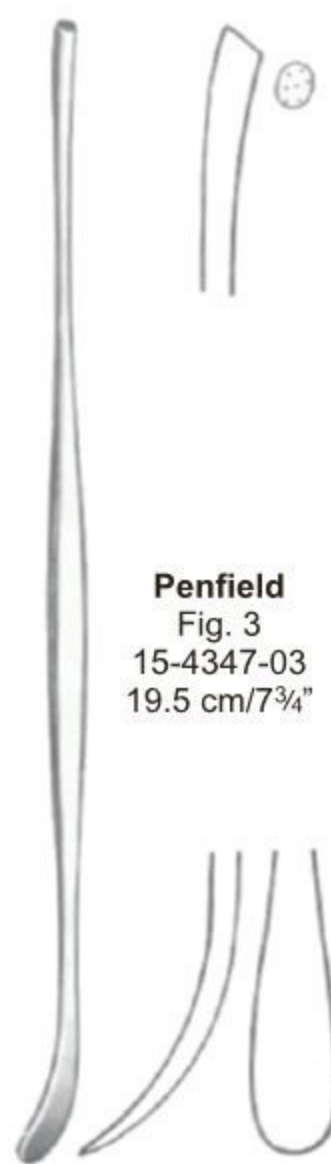
**Love-Adson**  
 15-4344-16  
 16 cm/6 1/2"



**Penfield**  
 Fig. 1  
 15-4345-01  
 17.5 cm/7"



**Penfield**  
 Fig. 2  
 15-4346-02  
 19.5 cm/7 3/4"



**Penfield**  
 Fig. 3  
 15-4347-03  
 19.5 cm/7 3/4"



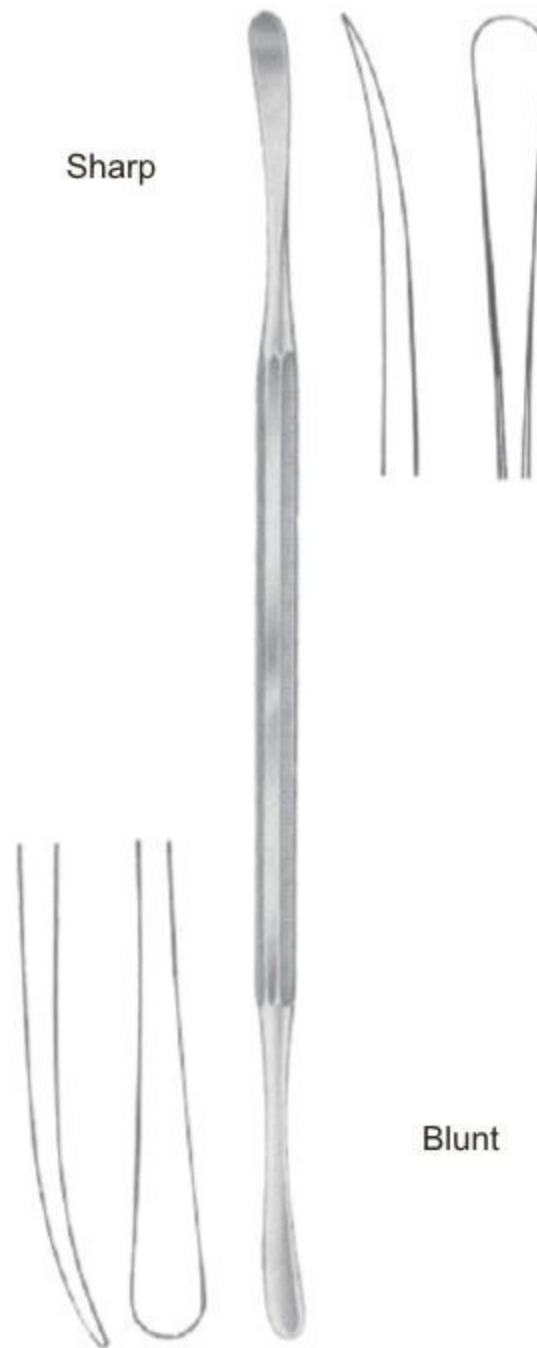
**Penfield**  
 Fig. 4  
 15-4348-04  
 21.5 cm/8 1/2"



**Penfield**  
 Fig. 5  
 15-4349-05  
 29 cm/11 1/2"



**Sachs**  
 15-4350-21  
 21 cm/8¼"



15-4351-22  
 22 cm/8¼"



**Woodsen**  
 15-4352-25  
 25 cm/10"



**Frager**  
 15-4353-20  
 20 cm/8"



**Frager**  
 15-4354-20  
 20 cm/8"



**Sachs**  
 15-4355-21  
 21 cm/8¼"



**Milligan**  
 15-4356-21  
 21 cm/8¼"



**Olivecrona**  
 15-4357-18 18 cm/7"  
 15-4357-24 24 cm/9½"



**Olivecrona**  
 15-4358-19 19.5 cm/7¾"  
 15-4358-24 24 cm/9½"



**Horsley**  
 15-4359-20  
 20 cm/8"



**Sachs**  
 15-4360-21  
 21 cm/8¼"

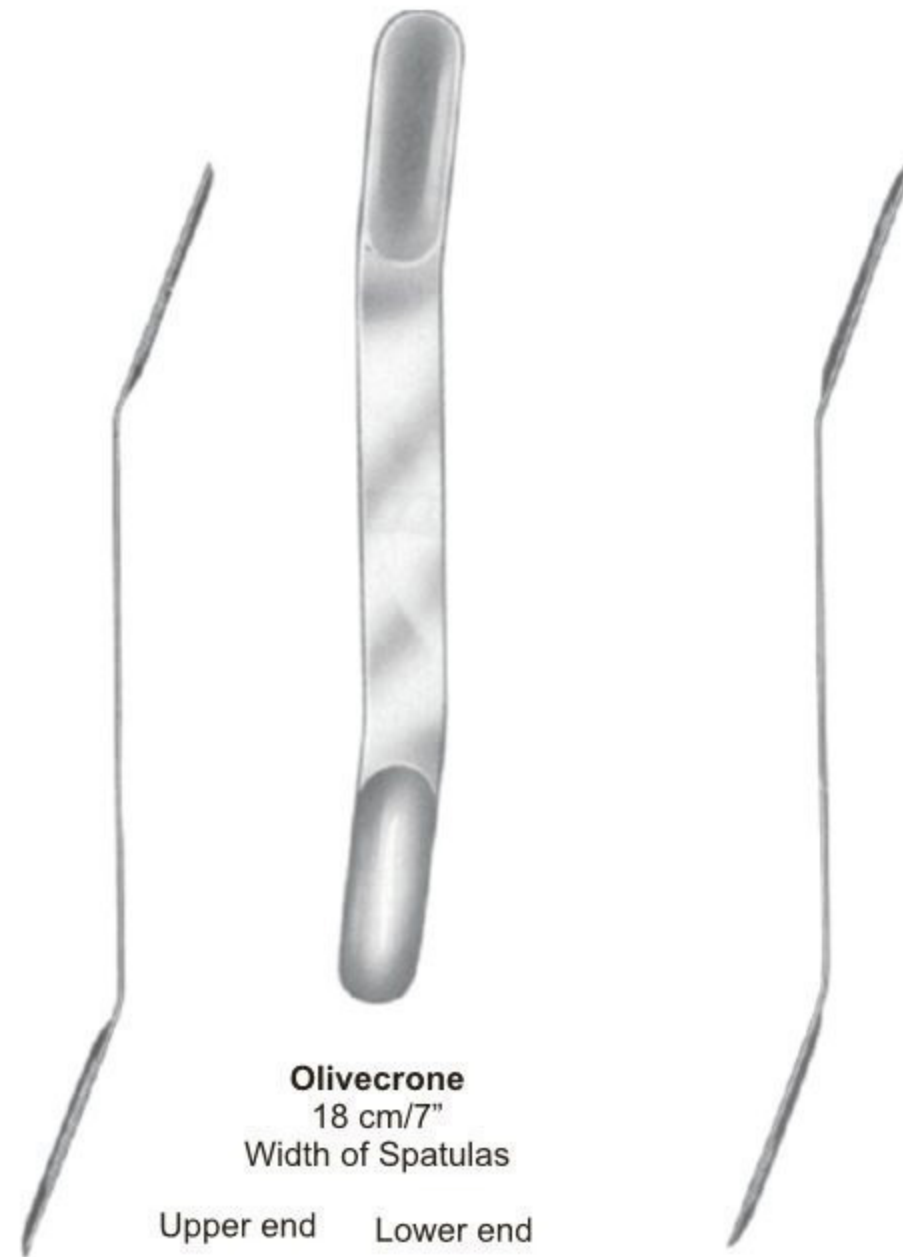


Brain Spatulas, Malleable Spatulas ●— EN  
 Hirnspatel, Temperguss Spatel ●— DE  
 Espátulas cerebrales, Espátulas maleable ●— ES



**Cushing**  
 17 cm/6¾"  
 20 cm/8"  
 28 cm/11"

15-4361-17  
 15-4361-20  
 15-4361-28



**Olivecrona**  
 18 cm/7"  
 Width of Spatulas

|            | Upper end | Lower end |            |
|------------|-----------|-----------|------------|
| Concave    | mm        | mm        | Convex     |
| 15-4362-01 | 7         | 9         | 15-4363-01 |
| 15-4362-02 | 11        | 13        | 15-4363-02 |
| 15-4362-03 | 15        | 18        | 15-4363-03 |
| 15-4362-04 | 18        | 22        | 15-4363-04 |



**Heifetz**  
 20 cm/8"

Width of Spatulas

| Upper end |            | Lower end |
|-----------|------------|-----------|
| mm        |            | mm        |
| 7         | 15-4364-08 | 8         |
| 10        | 15-4364-11 | 11        |
| 13        | 15-4364-13 | 14        |
| 16        | 15-4364-17 | 17        |
| 19        | 15-4364-20 | 20        |
| 22        | 15-4364-25 | 22        |



**Heifetz**  
 15.5 cm/6"

Width of Spatulas

|            |    |
|------------|----|
| 15-4365-08 | 8  |
| 15-4365-11 | 11 |
| 15-4365-13 | 14 |
| 15-4365-17 | 17 |

Length of Spatulas



18 cm/7"

Width of spatulas

| Upper end | Lower end |            |
|-----------|-----------|------------|
| mm        | mm        |            |
| 7         | 9         | 15-4366-09 |
| 11        | 13        | 15-4366-13 |
| 15        | 18        | 15-4366-18 |
| 18        | 22        | 15-4366-22 |



20 cm/8"  
 12 mm 15-4367-12  
 17 mm 15-4367-17



20 cm/8"  
 14 mm 15-4368-14  
 17 mm 15-4368-17  
 20 mm 15-4368-20



15-4369-01  
 19cm/7½"



Love  
 15-4370-02  
 19 cm/7½"



15-4371-03



Love  
 15-4372-21  
 21 cm/8¼"

Nerve Root Retractors ● EN  
 Nervwurzelhaken ● DE  
 Separadores de raíz de nervios ● ES

Length of spatulas



70 mm  
 3 mm 15-4373-03

100 mm  
 15-4374-03



5 mm 15-4373-05

15-4374-05



7 mm 15-4373-07

15-4374-07



Love



**Scoville**  
 23 cm/9"

7 mm 15-4375-07  
 9 mm 15-4375-09



**Holsher**  
 7mm 15-4376-07  
 9mm 15-4376-09  
 24 cm/9½"



8 mm 15-4377-08  
 13 mm 15-4377-13





**Taylor**  
 30x 70 mm 15-4378-07 17 cm/6¾"  
 30x100 mm 15-4378-10 17 cm/6¾"



**Oldberg**  
 21 cm/8¼"



15-4379-01



15-4379-02



15-4379-03



15-4379-04

Nerve Root Retractors ● EN  
 Nervwurzelhaken ● DE  
 Separadores de raíz de nervios ● ES



**Cushing**  
 15-4380-19 19 cm/7 $\frac{3}{4}$ "  
 15-4380-28 28 cm/11"



**Smithwick**  
 15-4381-17 17 cm/6 $\frac{1}{2}$ "  
 15-4381-21 21 cm/8 $\frac{1}{4}$ "



**Cushnig**  
 15-4382-14  
 14 cm/5 $\frac{1}{2}$ "



**Adson**  
 20 cm/8"



15-4383-01



15-4383-02



**Cloward**  
 15-4384-16  
 16 cm/6 1/2"



**Hoen**  
 15-4385-22  
 22 cm/8 3/4"



**Dandy**  
 15-4386-01  
 20 cm/8"



**Dandy**  
 15-4387-02  
 20 cm/8"



**Dandy**  
 15-4388-03  
 20 cm/8"



**Smithwick**  
 15-4389-29  
 29 cm/11 3/4"



**Scoville**  
 15-4390-30  
 30 cm/12"



**Scoville**  
 15-4391-30  
 30 cm/12"



Nerve Retractors and Knives ● EN  
 Nerve Retraktoren und Messer ● DE  
 Retractores del nervio y Cuchillos ● ES



**Graham**  
 15-4392-16  
 16.5 cm/6½"



**Toennis**  
 15-4393-15  
 15 cm/6"



**Frazier**  
 15-4394-13 13 cm/5"  
 15-4394-18 18 cm/7"



**Toennis**  
 15-4395-13 13 cm/5"  
 15-4395-18 18 cm/7"



**Olivecrona**  
 15-4396-23  
 23 cm/9"



**Olivecrona**  
 15-4397-20  
 20.5 cm/8"



Ferris-Smith-Kerrison

|                    |  | Width of Bite | Length of Shaft |            |            |
|--------------------|--|---------------|-----------------|------------|------------|
|                    |  |               | 15 cm/6"        | 20 cm/8"   | 18 cm/7"   |
| Cutting Upward     |  | 0.6 mm        |                 |            | 15-4404-00 |
|                    |  | 1 mm          |                 |            | 15-4404-01 |
|                    |  | 2 mm          |                 |            | 15-4404-02 |
|                    |  | 3 mm          | 15-4398-03      | 15-4401-03 | 15-4404-03 |
|                    |  | 4 mm          |                 |            | 15-4404-04 |
|                    |  | 5 mm          | 15-4398-05      | 15-4401-05 | 15-4404-05 |
| Cutting Upward 40° |  | 0.6 mm        |                 |            | 15-4405-00 |
|                    |  | 1 mm          |                 |            | 15-4405-01 |
|                    |  | 2 mm          |                 |            | 15-4405-02 |
|                    |  | 3 mm          | 15-4399-03      | 15-4402-03 | 15-4405-03 |
|                    |  | 4 mm          |                 |            | 15-4405-04 |
|                    |  | 5 mm          | 15-4399-05      | 15-4402-05 | 15-4405-05 |
| Cutting Downwards  |  | 0.6 mm        |                 |            | 15-4406-00 |
|                    |  | 1 mm          |                 |            | 15-4406-01 |
|                    |  | 2 mm          |                 |            | 15-4406-02 |
|                    |  | 3 mm          | 15-4400-03      | 15-4403-03 | 15-4406-03 |
|                    |  | 4 mm          |                 |            | 15-4406-04 |
|                    |  | 5 mm          | 15-4400-05      | 15-4403-05 | 15-4406-05 |



Ferris-Smith-Kerrison

|                    |  | Width of Bite |            | Length of Shaft |            |
|--------------------|--|---------------|------------|-----------------|------------|
|                    |  |               | 15 cm/6"   | 20 cm/8"        | 18 cm/7"   |
| Cutting Upward     |  | 3 mm          | 15-4407-03 | 15-4410-03      | 15-4413-03 |
|                    |  | 5 mm          | 15-4407-05 | 15-4410-05      | 15-4413-05 |
| Cutting Upward 40° |  | 3 mm          | 15-4408-03 | 15-4411-03      |            |
|                    |  | 5 mm          | 15-4408-05 | 15-4411-05      |            |
| Cutting Downward   |  | 3 mm          | 15-4409-03 | 15-4412-03      | 15-4414-03 |
|                    |  | 5 mm          | 15-4409-05 | 15-4412-05      | 15-4414-05 |








Love-Kerrison

|                    |  | Width of Bite |            | Length of Shaft |            |
|--------------------|--|---------------|------------|-----------------|------------|
|                    |  | 2 mm          | 15 cm/6"   | 20 cm/8"        | 18 cm/7"   |
| Cutting Upward     |  | 2 mm          |            |                 | 15-4419-02 |
|                    |  | 3 mm          | 15-4415-03 | 15-4417-03      | 15-4419-03 |
|                    |  | 4 mm          | 15-4415-04 | 15-4417-04      | 15-4419-04 |
|                    |  | 5 mm          | 15-4415-05 | 15-4417-05      | 15-4419-05 |
|                    |  | 6 mm          |            |                 | 15-4419-06 |
|                    |  |               |            |                 |            |
| Cutting Upward 40° |  | 2 mm          |            |                 | 15-4420-02 |
|                    |  | 3 mm          |            |                 | 15-4420-03 |
|                    |  | 4 mm          |            |                 | 15-4420-04 |
|                    |  | 5 mm          |            |                 | 15-4420-05 |
|                    |  | 6 mm          |            |                 | 15-4420-06 |
|                    |  |               |            |                 |            |
| Cutting Downward   |  | 2 mm          |            |                 | 15-4421-02 |
|                    |  | 3 mm          | 15-4416-03 | 15-4418-03      | 15-4421-03 |
|                    |  | 4 mm          | 15-4416-04 | 15-4418-04      | 15-4421-04 |
|                    |  | 5 mm          | 15-4416-05 | 15-4418-05      | 15-4421-05 |
|                    |  | 6 mm          |            |                 | 15-4421-06 |
|                    |  |               |            |                 |            |
| Cutting Upward 40° |  | 2 mm          |            |                 | 15-4422-02 |
|                    |  | 3 mm          |            |                 | 15-4422-03 |
|                    |  | 4 mm          |            |                 | 15-4422-04 |
|                    |  | 5 mm          |            |                 | 15-4422-05 |
|                    |  | 6 mm          |            |                 | 15-4422-06 |
|                    |  |               |            |                 |            |



|                    |  | Width of Bite | Length of Shaft |            |
|--------------------|--|---------------|-----------------|------------|
| Cutting Upward     |  | 3 mm          | 15 cm/6"        | 20 cm/8"   |
|                    |  | 5 mm          | 15-4423-03      | 15-4426-03 |
| Cutting Upward 40° |  | 3 mm          | 15-4424-03      | 15-4427-03 |
|                    |  | 5 mm          | 15-4424-05      | 15-4427-05 |
| Cutting Downward   |  | 3 mm          | 15-4425-03      | 15-4428-03 |
|                    |  | 5 mm          | 15-4425-05      | 15-4428-05 |



|                                   | Length Of Shaft |            |            |            |
|-----------------------------------|-----------------|------------|------------|------------|
| <b>Cushing</b><br>2 x 10 cm       | 5"/13 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 6"/15 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 7"/18 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
| <b>Love-Grunwald</b><br>3 x 10 cm | 5"/13 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 6"/15 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 7"/18 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
| <b>Spurling</b><br>4 x 10 cm      | 5"/13 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 6"/15 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |
|                                   | 7"/18 cm        | 15-4429-01 | 15-4430-02 | 15-4431-03 |





With Suction/Irrigation Device

|                                   | Length Of Shaft |            |            |            |
|-----------------------------------|-----------------|------------|------------|------------|
| <b>Cushing</b><br>2 x 10 cm       | 5"/13 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 6"/15 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 7"/18 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
| <b>Love-Grunwald</b><br>3 x 10 cm | 5"/13 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 6"/15 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 7"/18 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
| <b>Spurling</b><br>4 x 10 cm      | 5"/13 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 6"/15 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |
|                                   | 7"/18 cm        | 15-4432-01 | 15-4433-02 | 15-4434-03 |

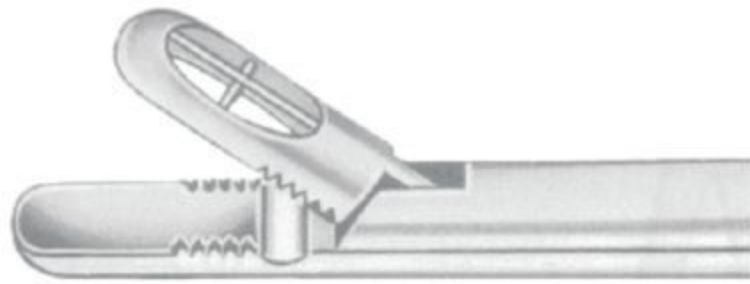


Ferris-Smith

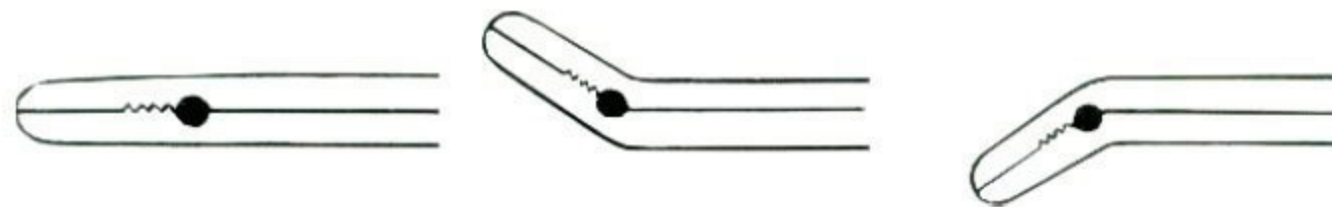
Width Of Jaw



|           |            |            |            |
|-----------|------------|------------|------------|
| 2 x 10 mm | 15-4435-01 | 15-4436-02 | 15-4437-03 |
| 3 x 10 mm | 15-4435-01 | 15-4436-02 | 15-4437-03 |
| 4 x 10 mm | 15-4435-01 | 15-4436-02 | 15-4437-03 |



Serrated and Fenestrated Jaws



| Width Of Jaw | Length Of Shaft |            |            |            |
|--------------|-----------------|------------|------------|------------|
| mm           | 14 cm/5 1/2"    | 15-4438-01 | 15-4438-02 | 15-4438-03 |
|              | 16 cm/6 1/4"    | 15-4439-01 | 15-4439-02 | 15-4439-03 |
| 2 x 12       | 14 cm/5 1/2"    | 15-4440-01 | 15-4440-02 | 15-4440-03 |
|              | 16 cm/6 1/4"    | 15-4441-01 | 15-4441-02 | 15-4441-03 |
| 3 x 12       | 14 cm/5 1/2"    | 15-4442-01 | 15-4442-02 | 15-4442-03 |
|              | 16 cm/6 1/4"    | 15-4443-01 | 15-4443-02 | 15-4443-03 |
| 4 x 14       | 14 cm/5 1/2"    | 15-4444-01 | 15-4444-02 | 15-4444-03 |
|              | 16 cm/6 1/4"    | 15-4445-01 | 15-4445-02 | 15-4445-03 |
| 5 x 14       | 14 cm/5 1/2"    | 15-4446-01 | 15-4446-02 | 15-4446-03 |
|              | 16 cm/6 1/4"    | 15-4447-01 | 15-4447-02 | 15-4447-03 |
| 6 x 16       | 14 cm/5 1/2"    |            |            |            |
|              | 16 cm/6 1/4"    |            |            |            |





**Yasargil**  
 15-4448-35  
 19.5 cm/7¾"



**Oldberg**  
 15-4449-65  
 18 cm/7"



**Landolt**  
 15-4450-90  
 21 cm/8¼"  
 Tumor Grasping Forceps Blunt

Laminectomy Rongeurs ● EN  
 Laminektomie-Zangen ● DE  
 Pinzas cortantes para laminectomía ● ES



Weil-Blakesley



15-4451-01



15-4451-02



15-4451-03



15-4451-04



15-4451-05



15-4452-01



15-4452-02



15-4452-03



15-4452-04



15-4452-05



15-4453-01



15-4453-02



15-4453-03



15-4453-04



15-4453-05



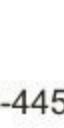
15-4454-01



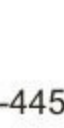
15-4454-02



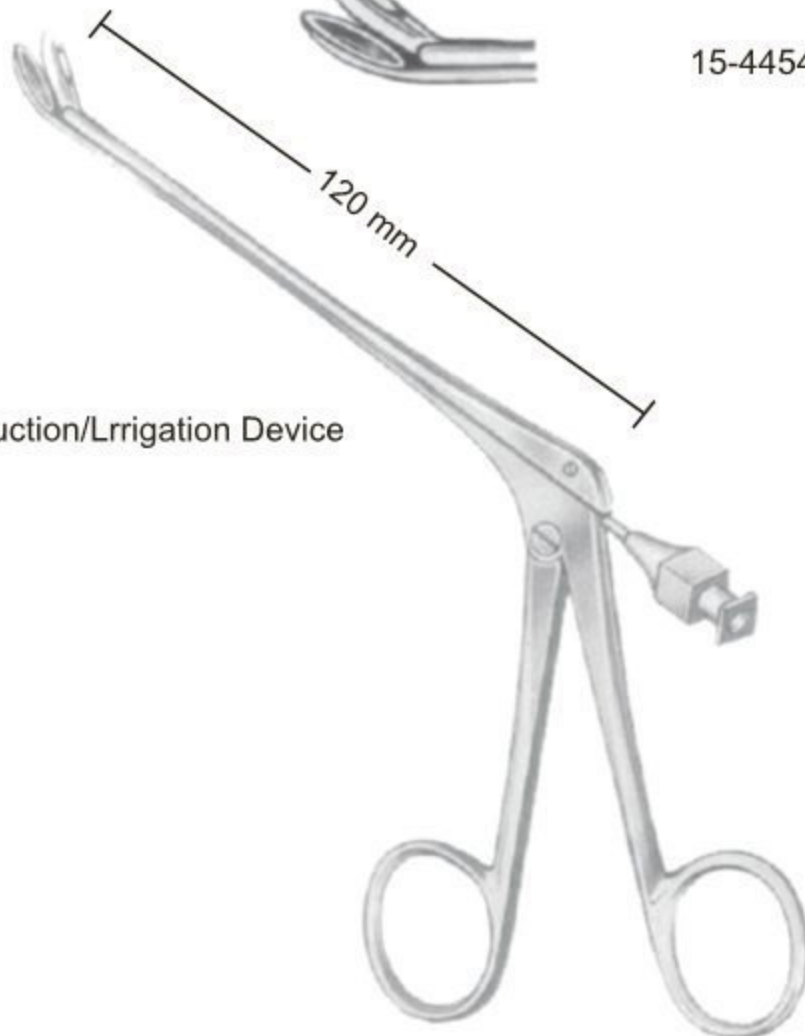
15-4454-03



15-4454-04

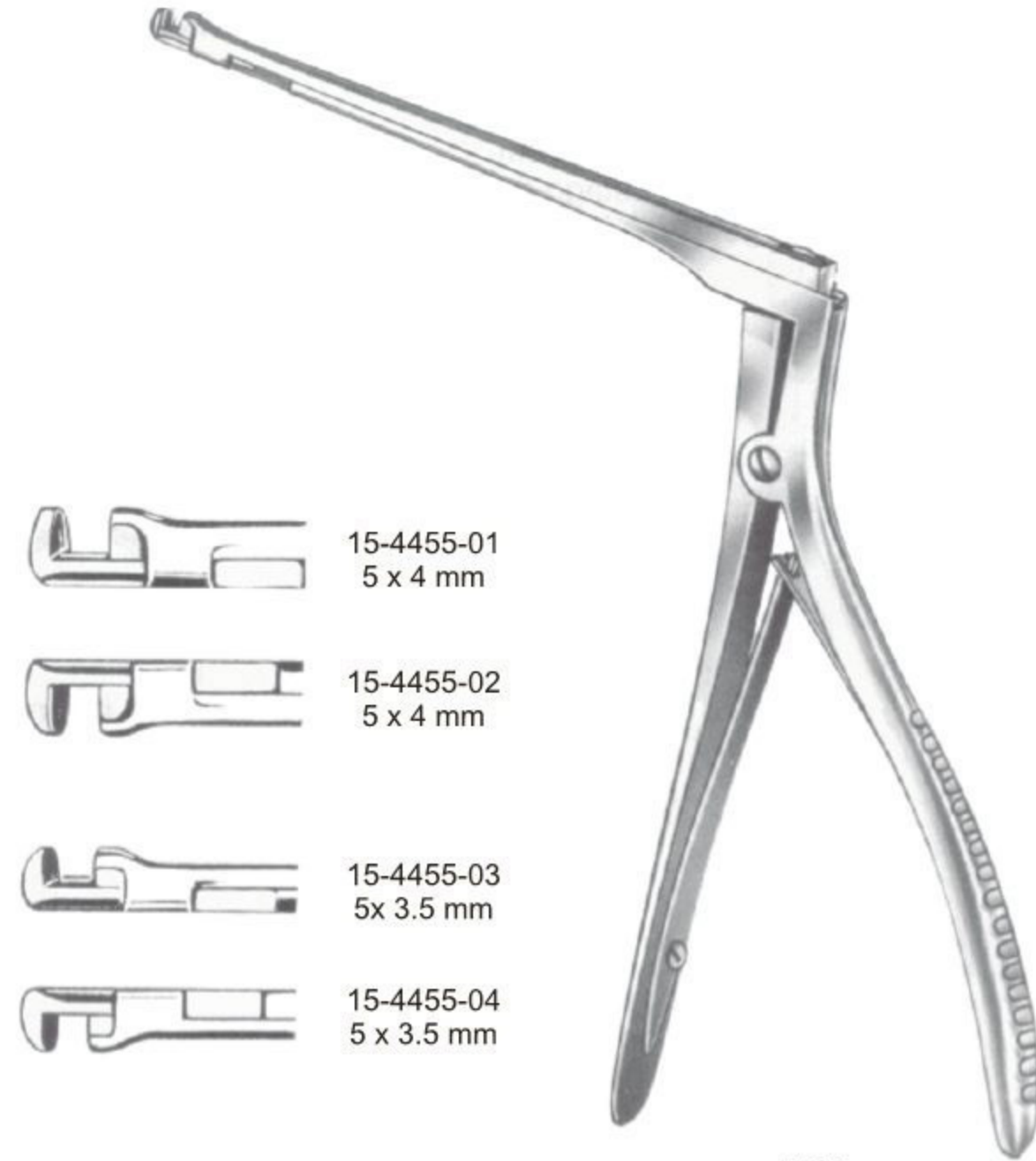






15-4454-05



With Suction/Irrigation Device

Weil-Blakesley



-  15-4455-01  
5 x 4 mm
-  15-4455-02  
5 x 4 mm
-  15-4455-03  
5 x 3.5 mm
-  15-4455-04  
5 x 3.5 mm

**Hajek  
 (Hajek-Kofler)**  
 14 cm/5½"

360° Turnable



**Hajek-Kofler**  
 15-4456-16  
 16 cm/6½"