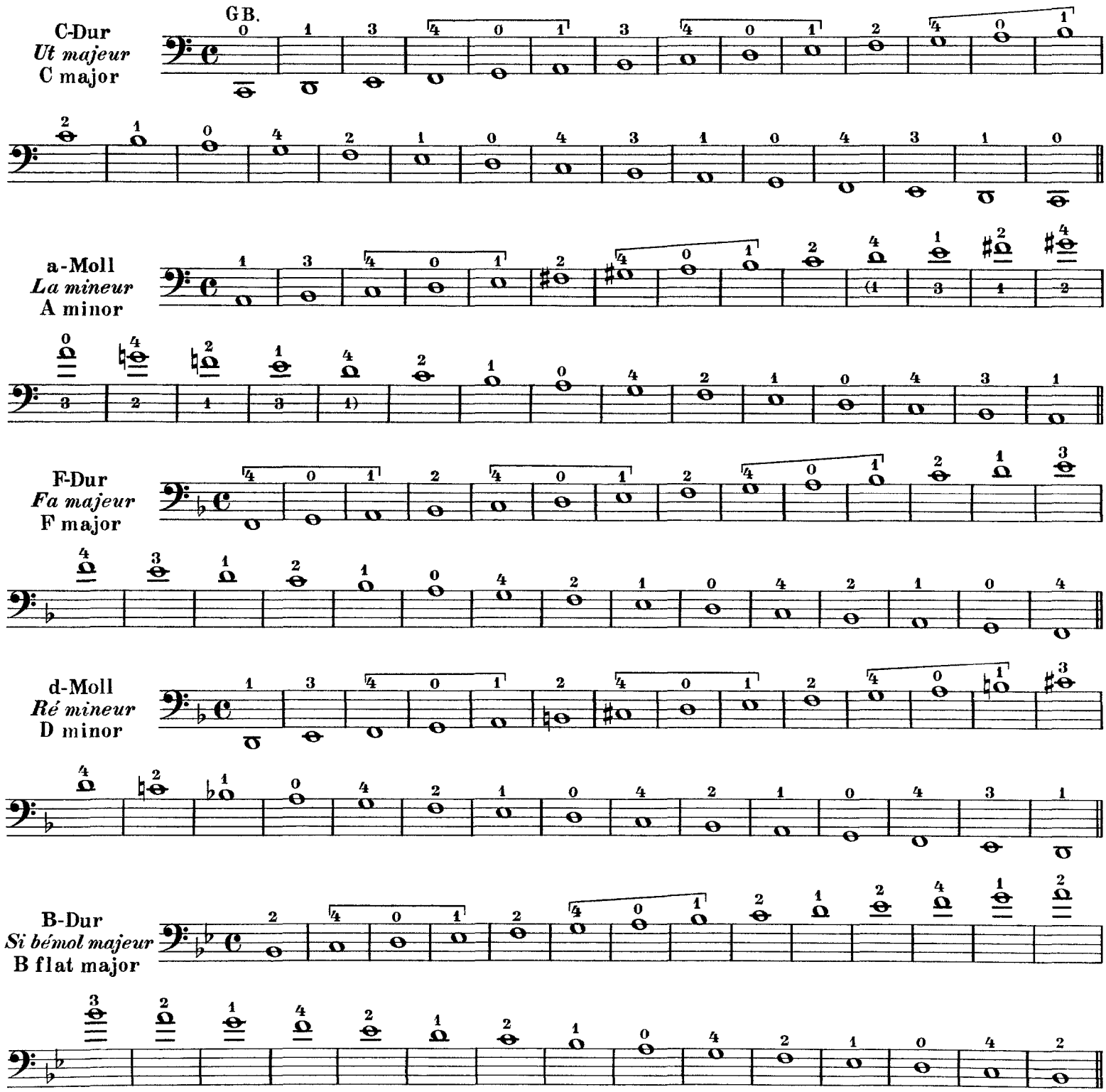
Technische Studien
Etudes techiques Technical Studies

Julius Klengel

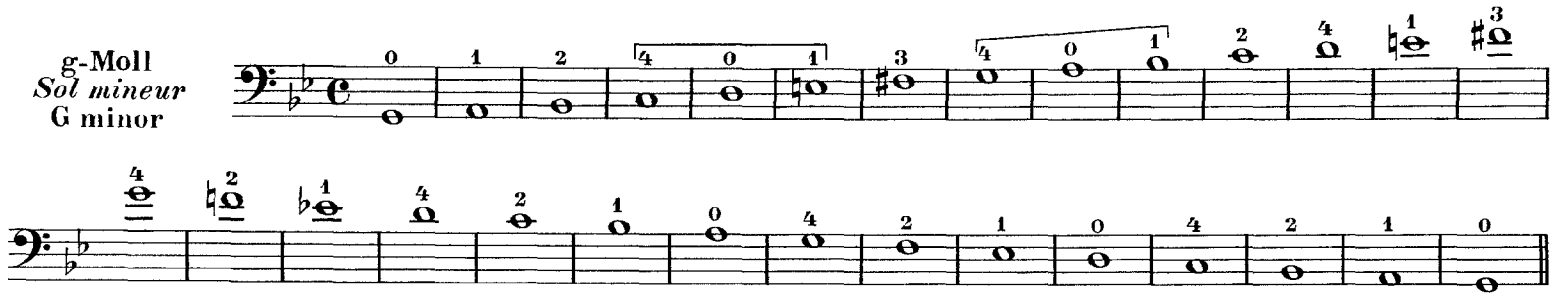
Tonleitern in zwei Oktaven

Gammes dans l'intervalle de deux octaves

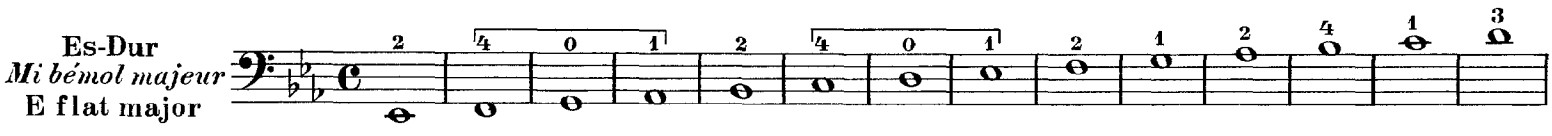
Scales in two octaves

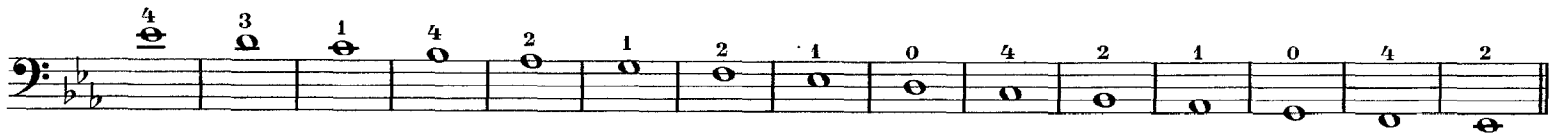


g-Moll
Sol mineur
G minor

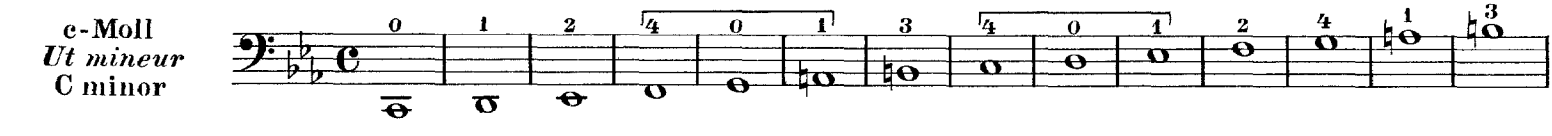


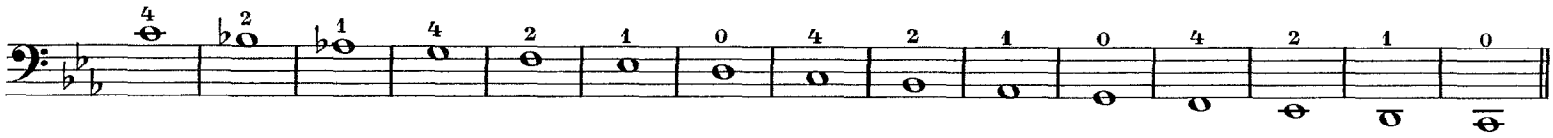
Es-Dur
Mi bémol majeur
E flat major



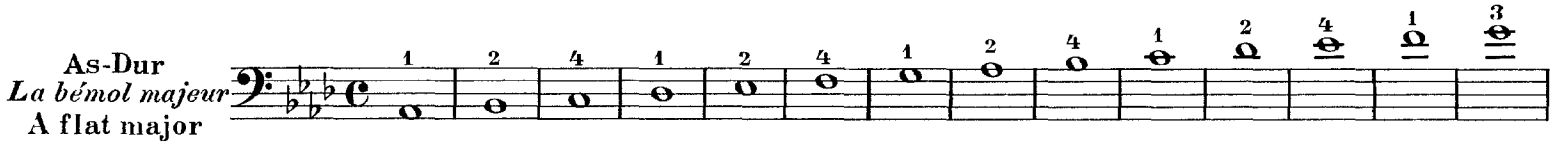


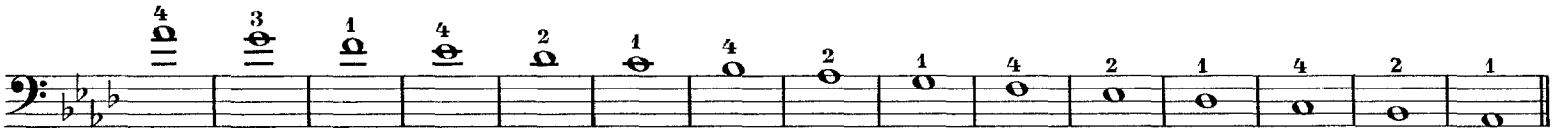
c-Moll
Ut mineur
C minor



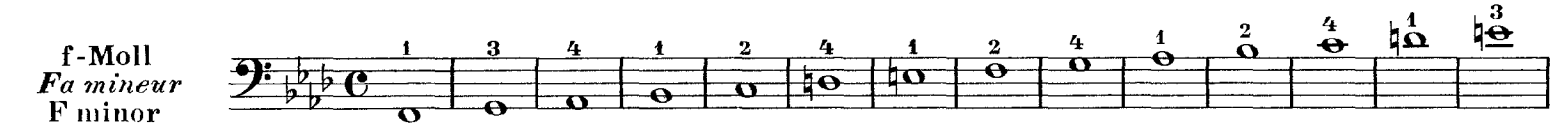


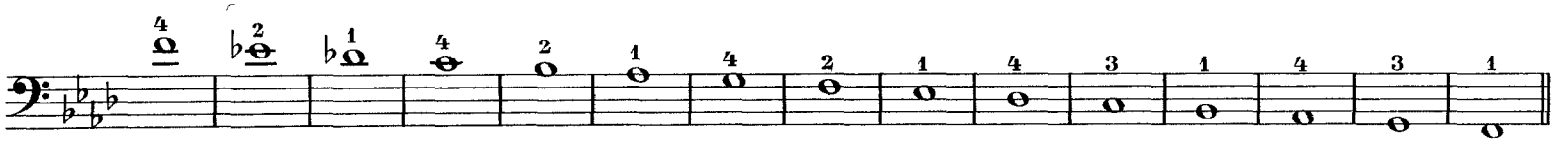
As-Dur
La bémol majeur
A flat major



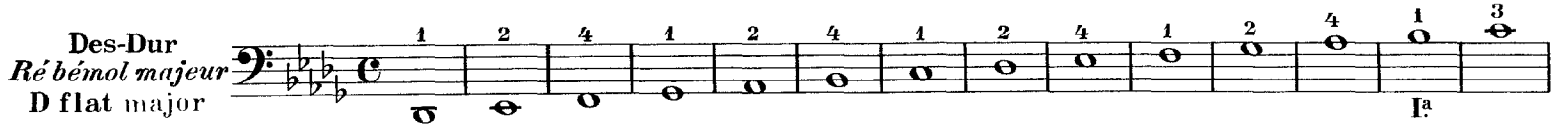


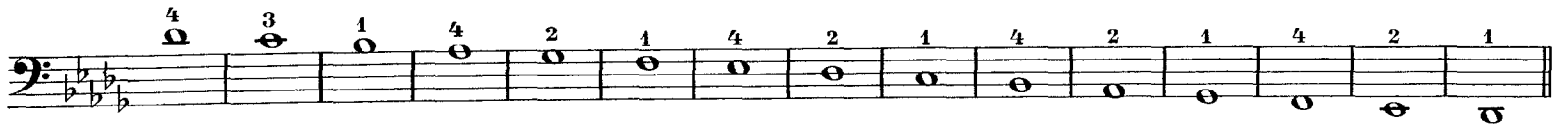
f-Moll
Fa mineur
F minor



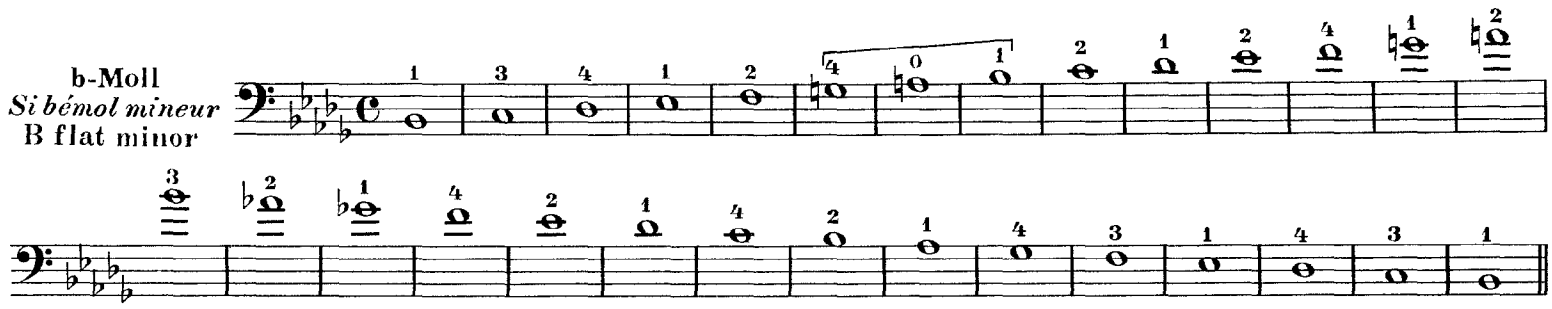


Des-Dur
Ré bémol majeur
D flat major

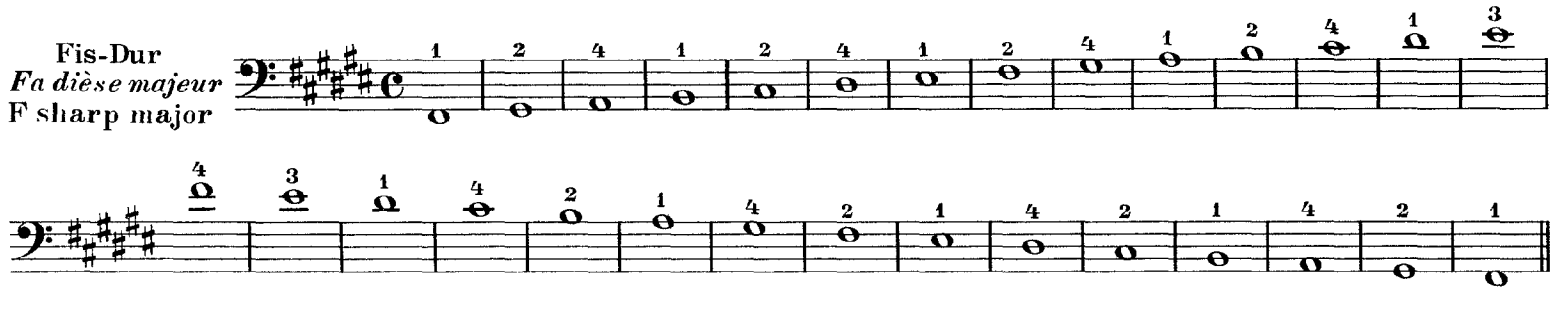




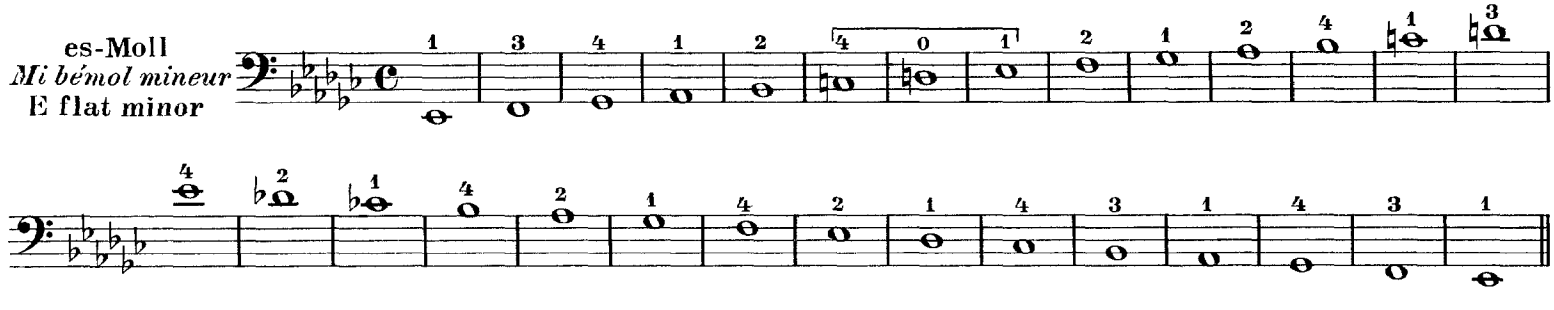
b-Moll
Si bémol mineur
B flat minor



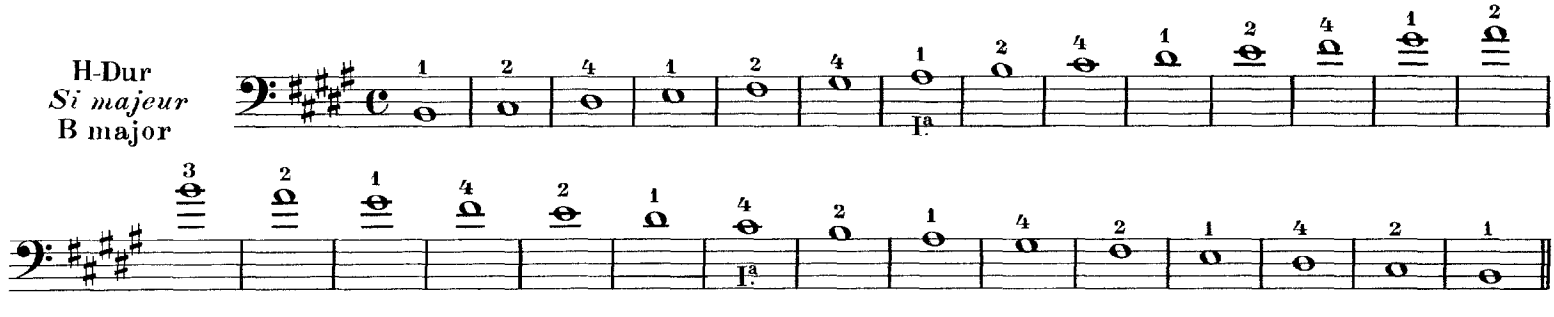
Fis-Dur
Fa dièse majeur
F sharp major



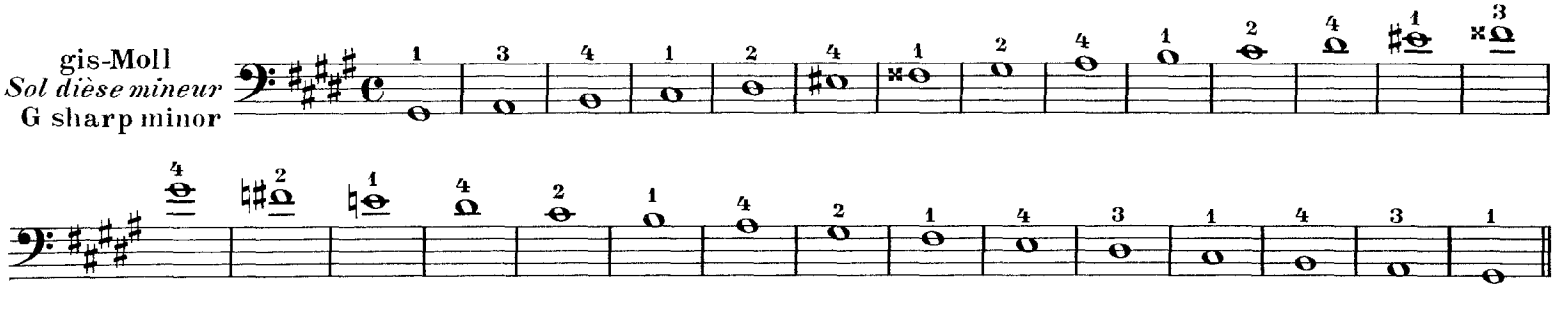
es-Moll
Mi bémol mineur
E flat minor



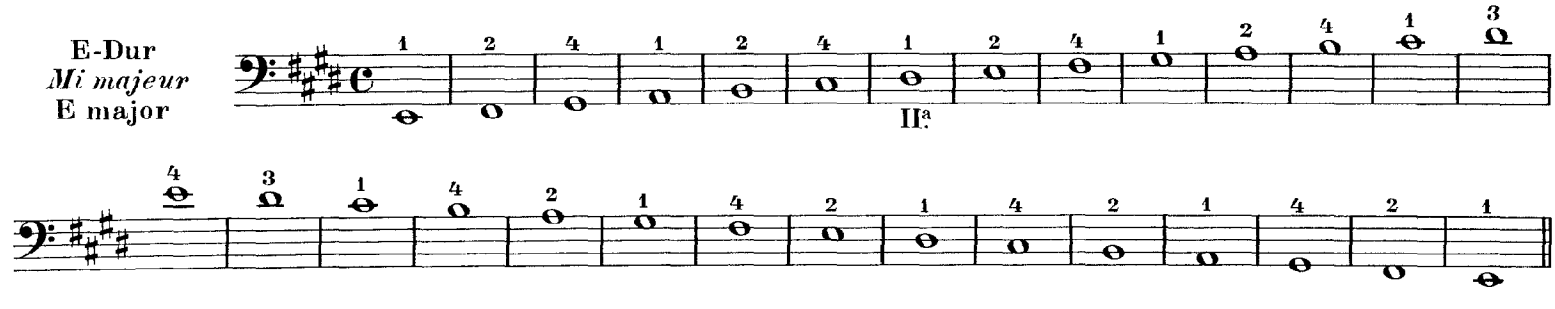
H-Dur
Si majeur
B major



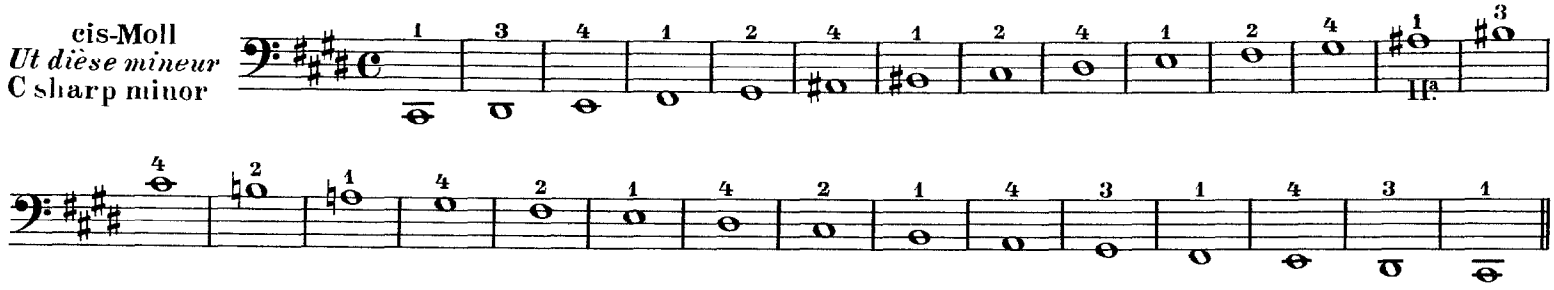
gis-Moll
Sol dièse mineur
G sharp minor



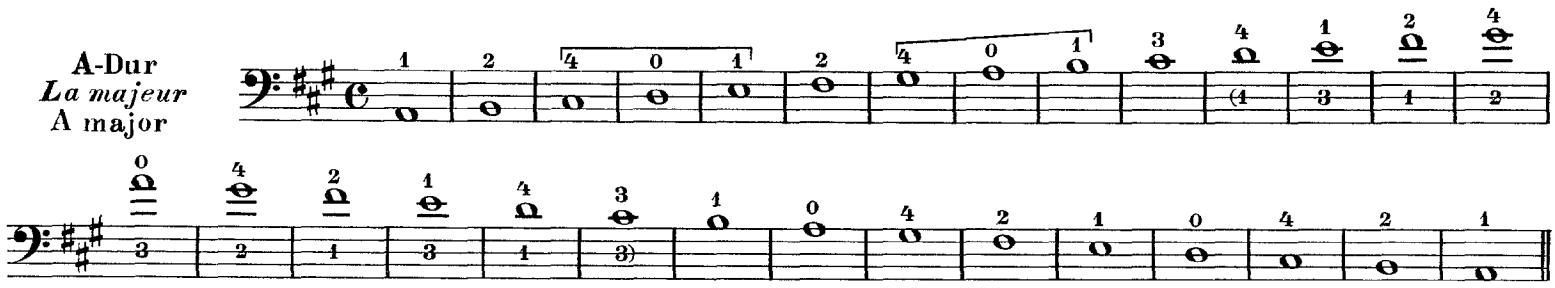
E-Dur
Mi majeur
E major



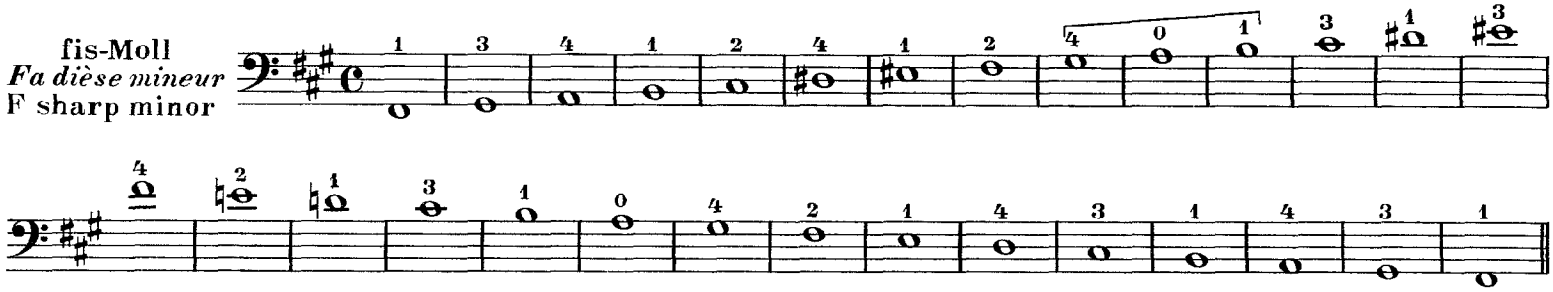
cis-Moll
Ut dièse mineur
C sharp minor



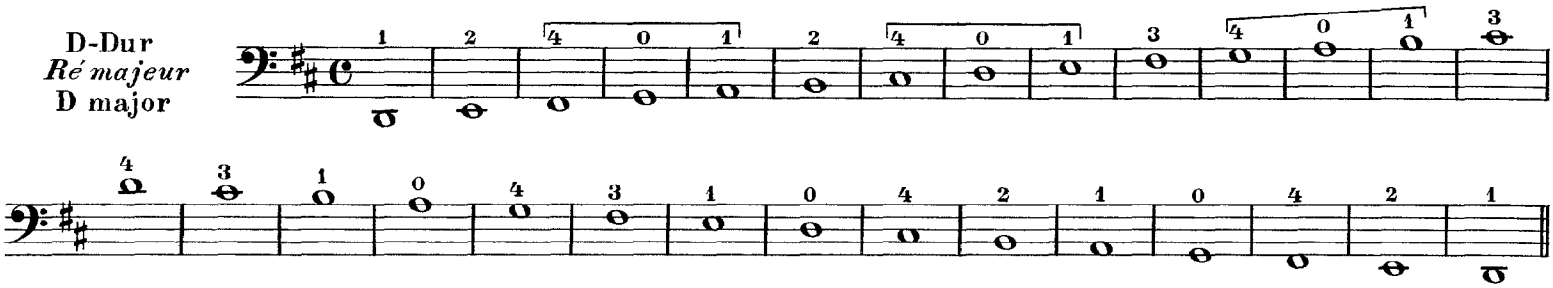
A-Dur
La majeur
A major



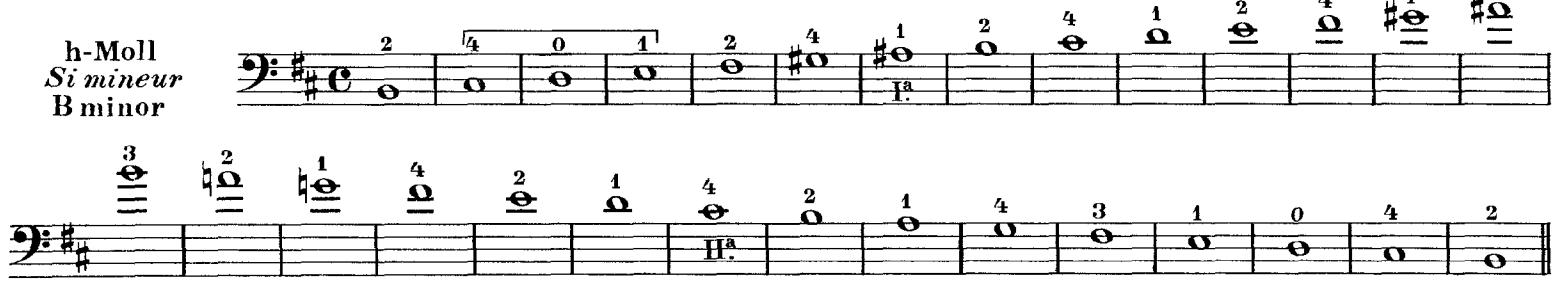
fis-Moll
Fa dièse mineur
F sharp minor



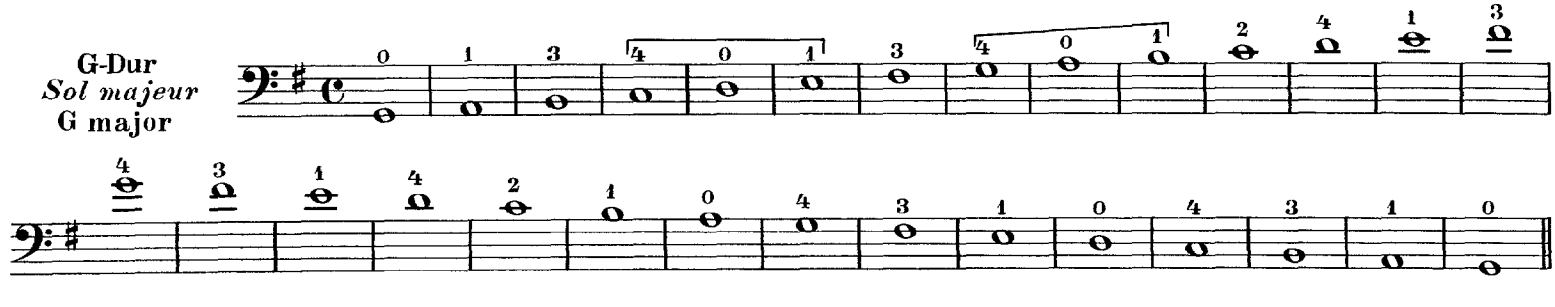
D-Dur
Ré majeur
D major

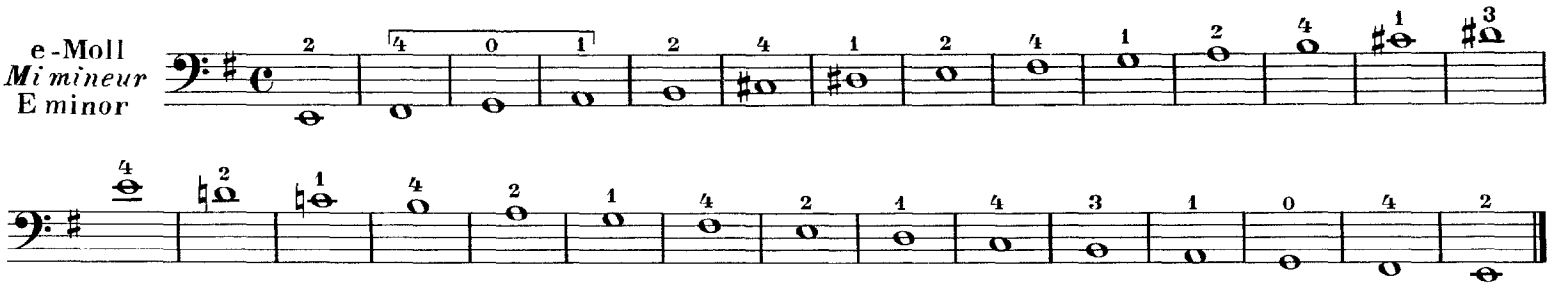


h-Moll
Si mineur
B minor



G-Dur
Sol majeur
G major

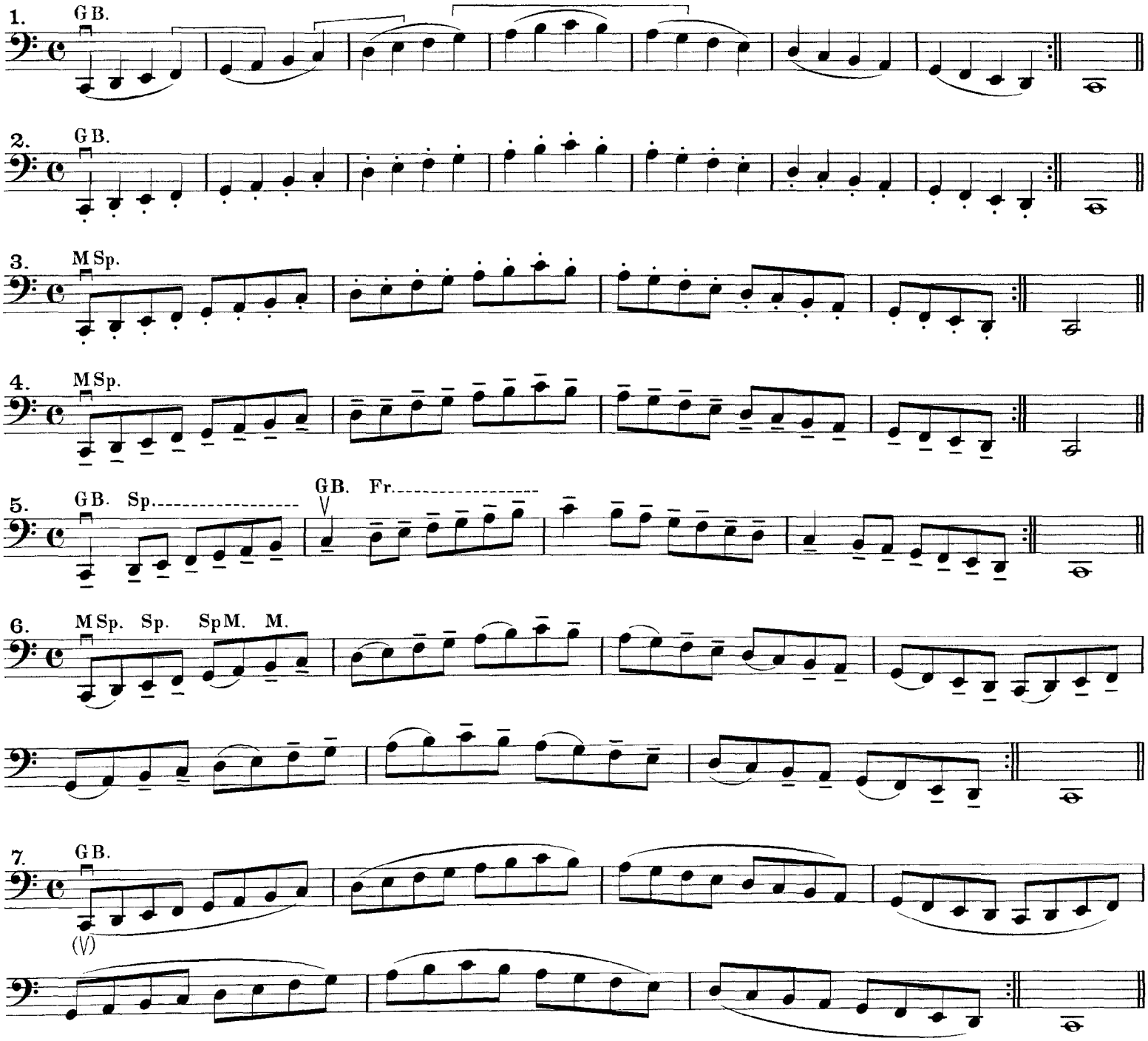


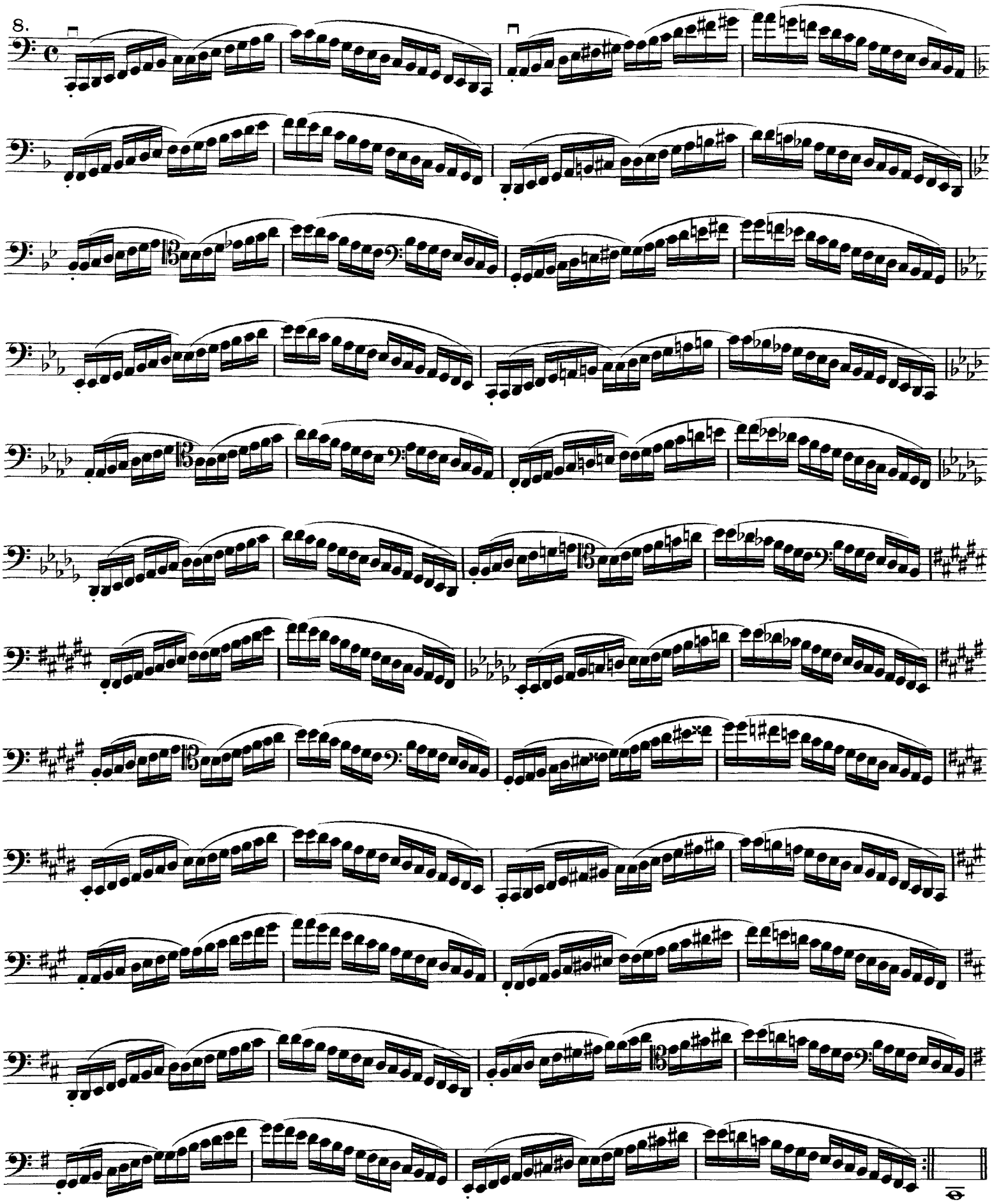


Stricharten für die Tonleitern in zwei Oktaven

Coups d'archets pour les gammes dans l'intervalle de deux octaves

Bowings for scales of two octaves

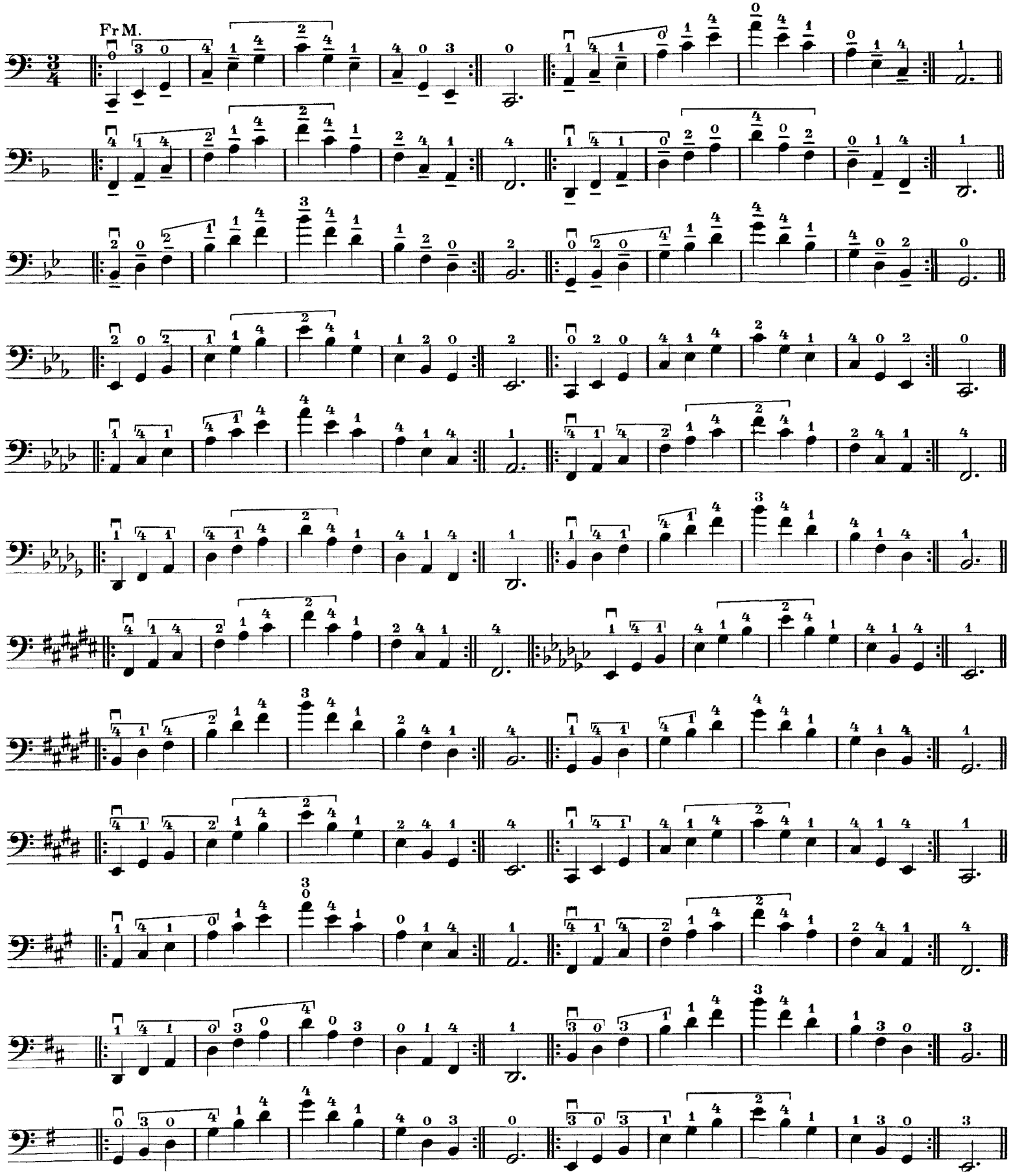



8.

Dreiklänge in zwei Oktaven

Accords de trois sons dans l'intervalle de deux octaves

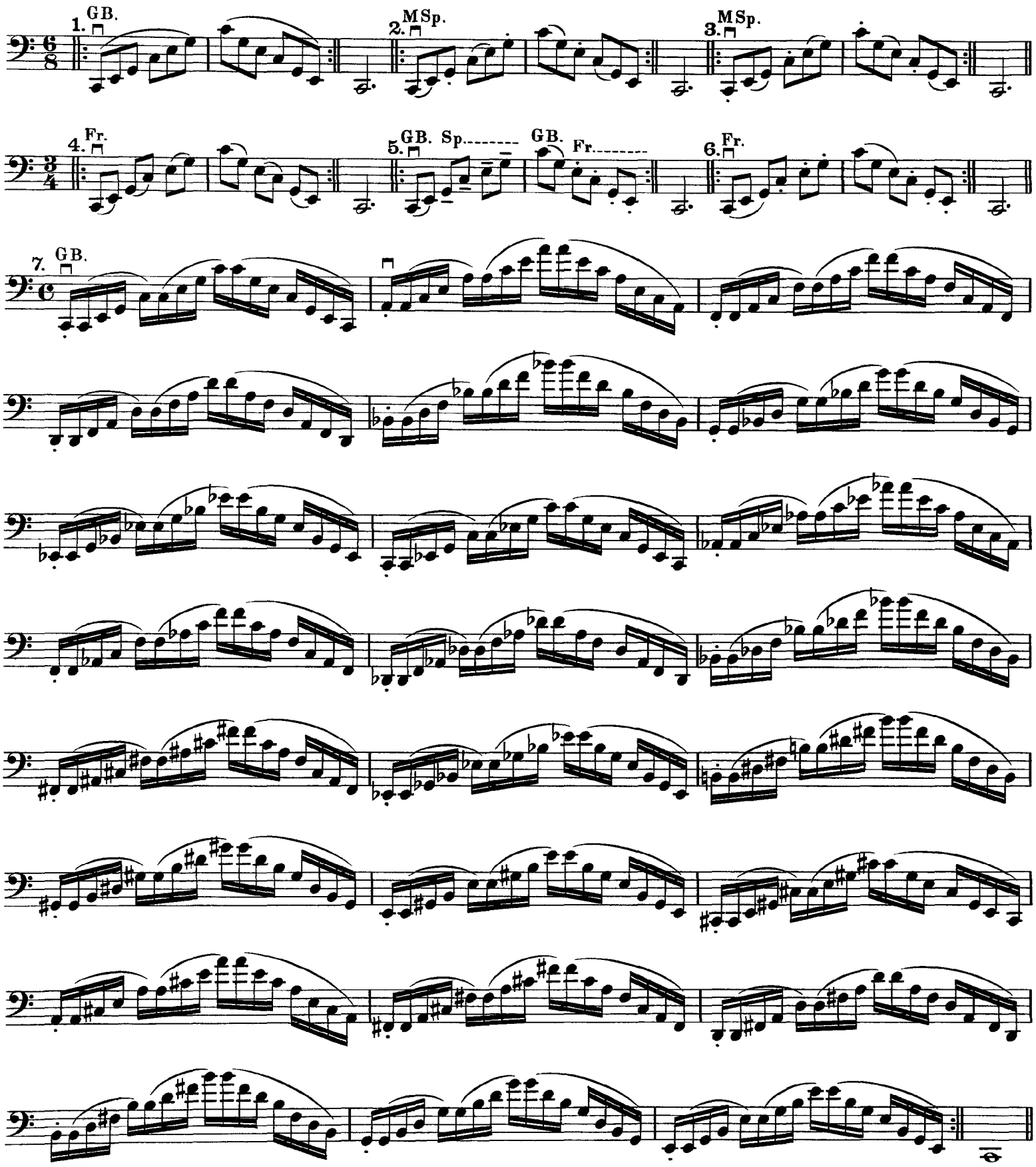
Triads through two octaves



Stricharten für die Dreiklänge in zwei Oktaven

Coups d'archets pour les accords de trois sons dans l'intervalle de deux octaves

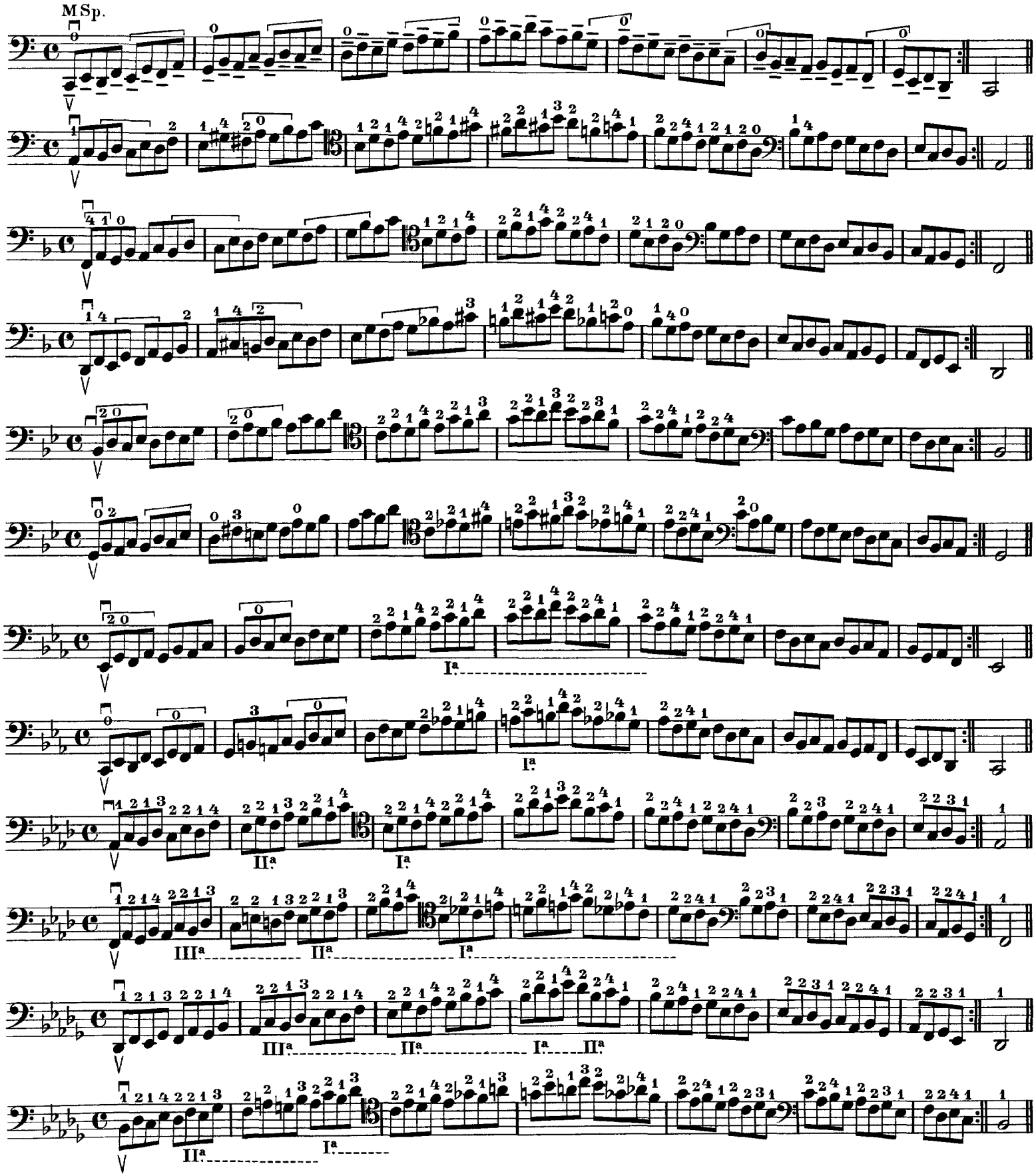
Bowings for Triads through two octaves

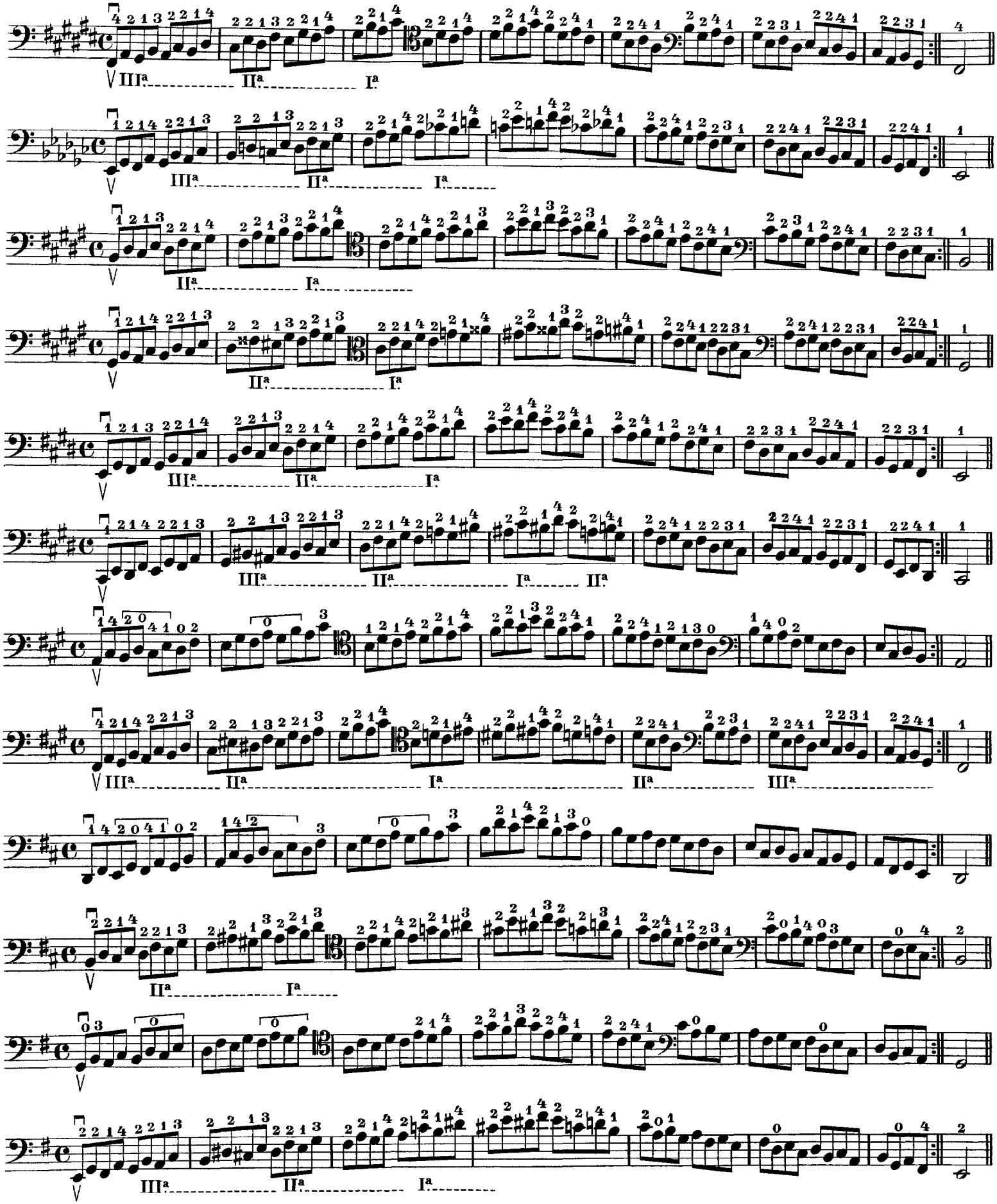


Terzentonleitern in zwei Oktaven (Gebrochene Terzen)

Gammes en tierces dans l'intervalle de deux octaves. (*tierces brisées*)

Scales in thirds of two octaves. (broken thirds)

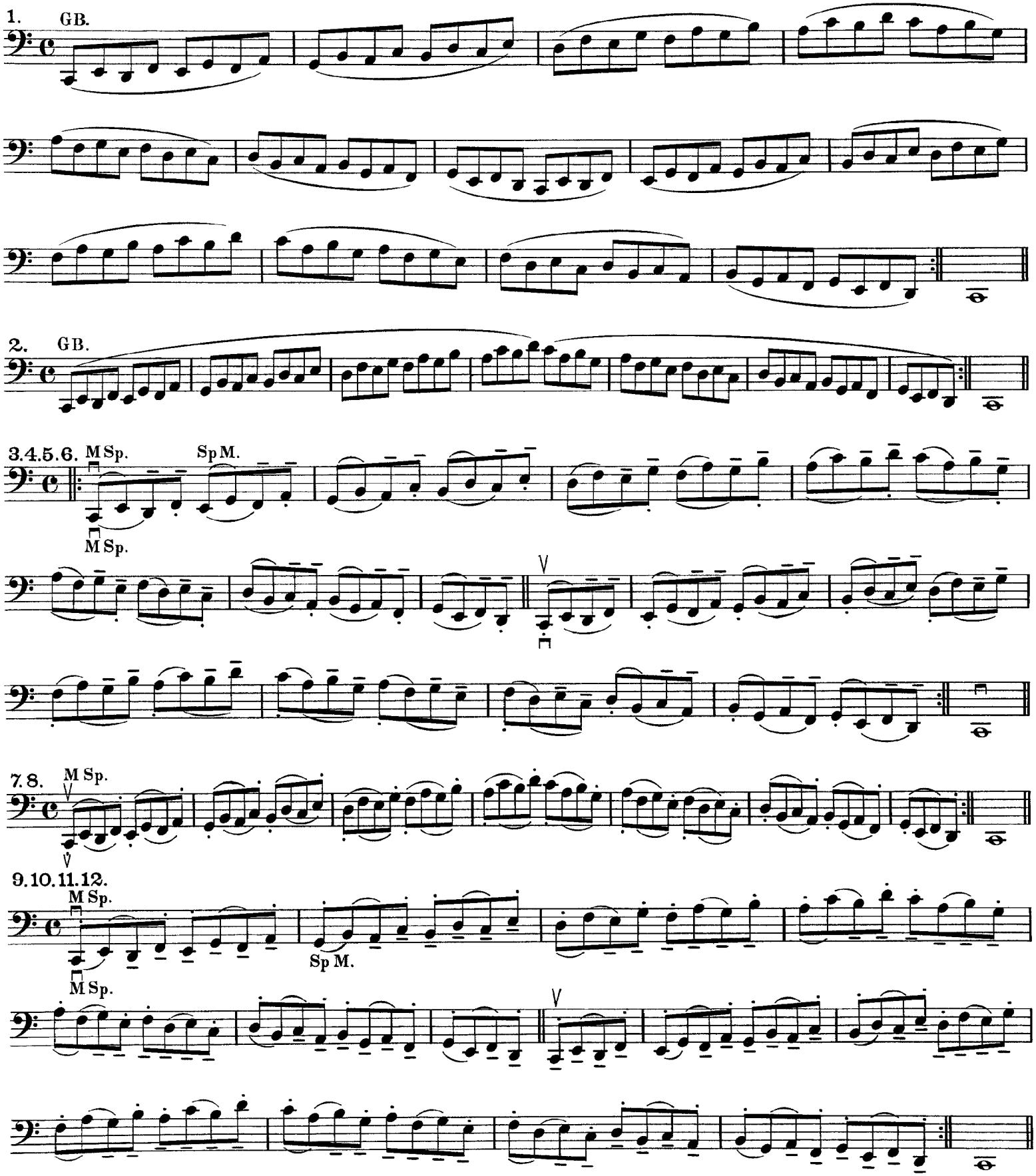



IIIa IIa Ia
IIIa IIa Ia
IIa Ia
IIa Ia
IIIa IIa Ia
IIIa IIa Ia IIa
IIIa IIa Ia IIa IIIa
IIa Ia
IIIa IIa Ia

Stricharten für die Terzentonleitern in zwei Oktaven

Coups d'archets pour les gammes en tierces dans l intervalle de deux octaves

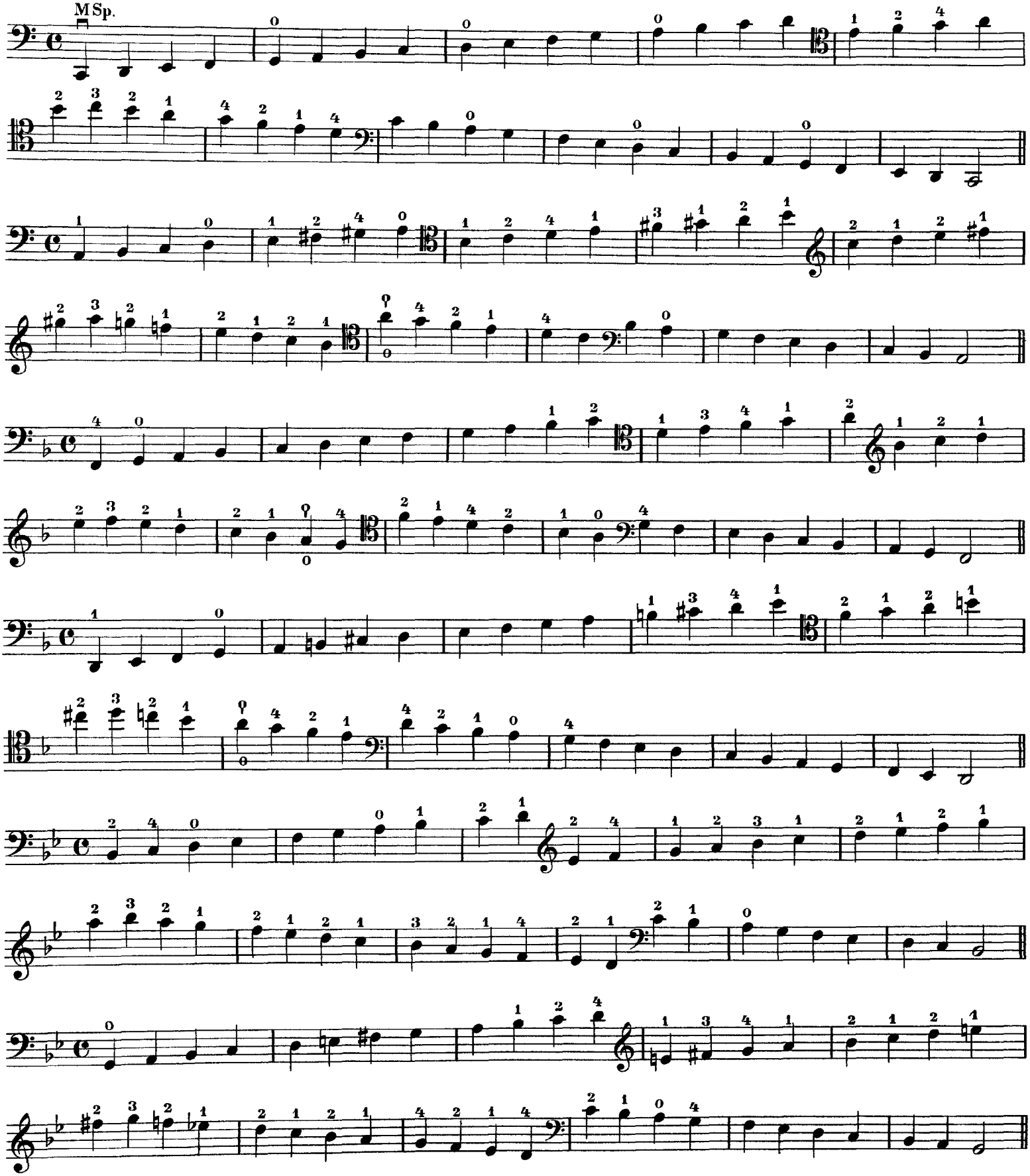
Bowings for scales in thirds of two octaves

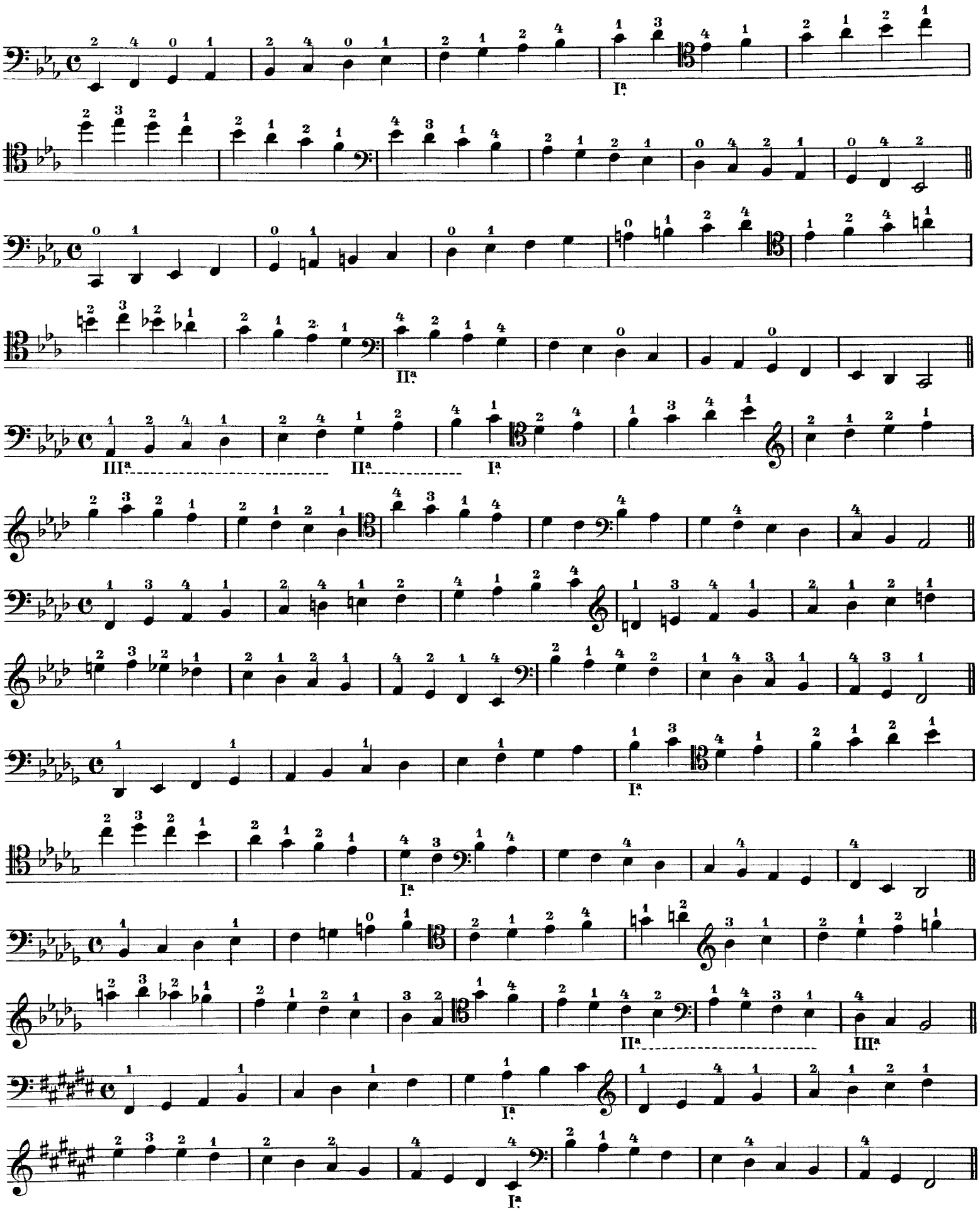


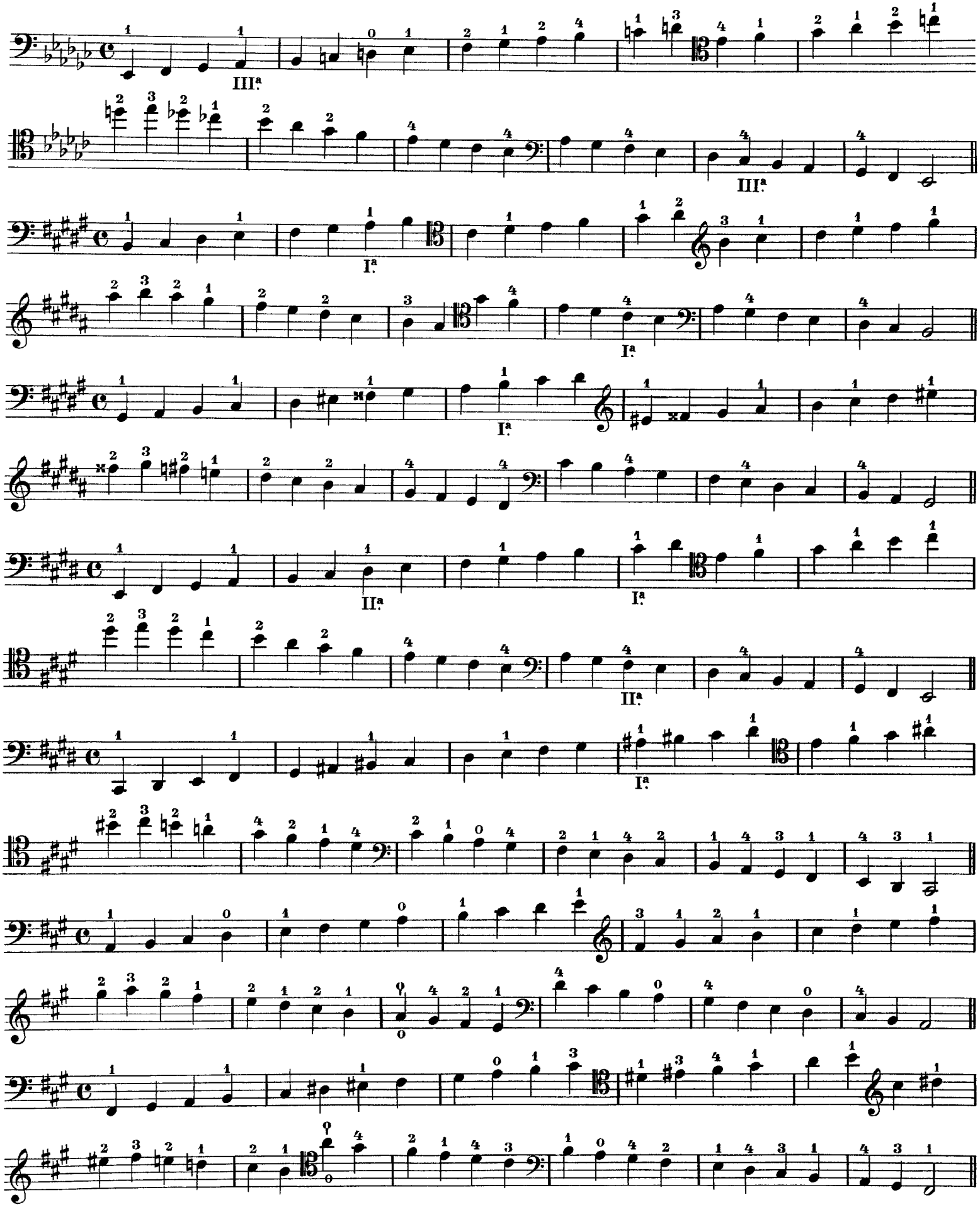
Tonleitern in drei Oktaven

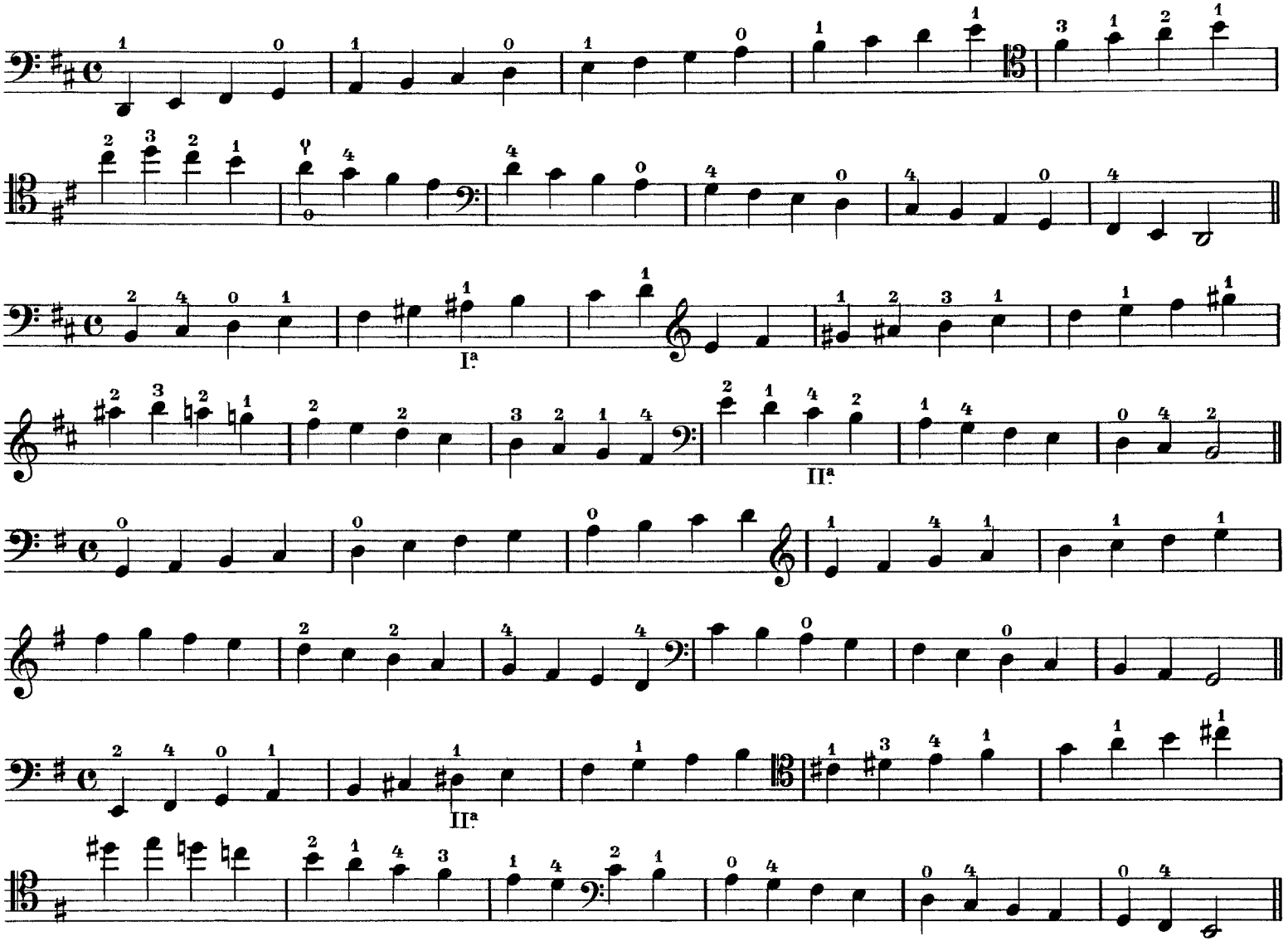
Gammes dans l'intervalle de trois octaves

Scales in three octaves




Ia
IIa
IIIa
IIa
Ia
Ia
Ia
IIa
IIIa
Ia
Ia

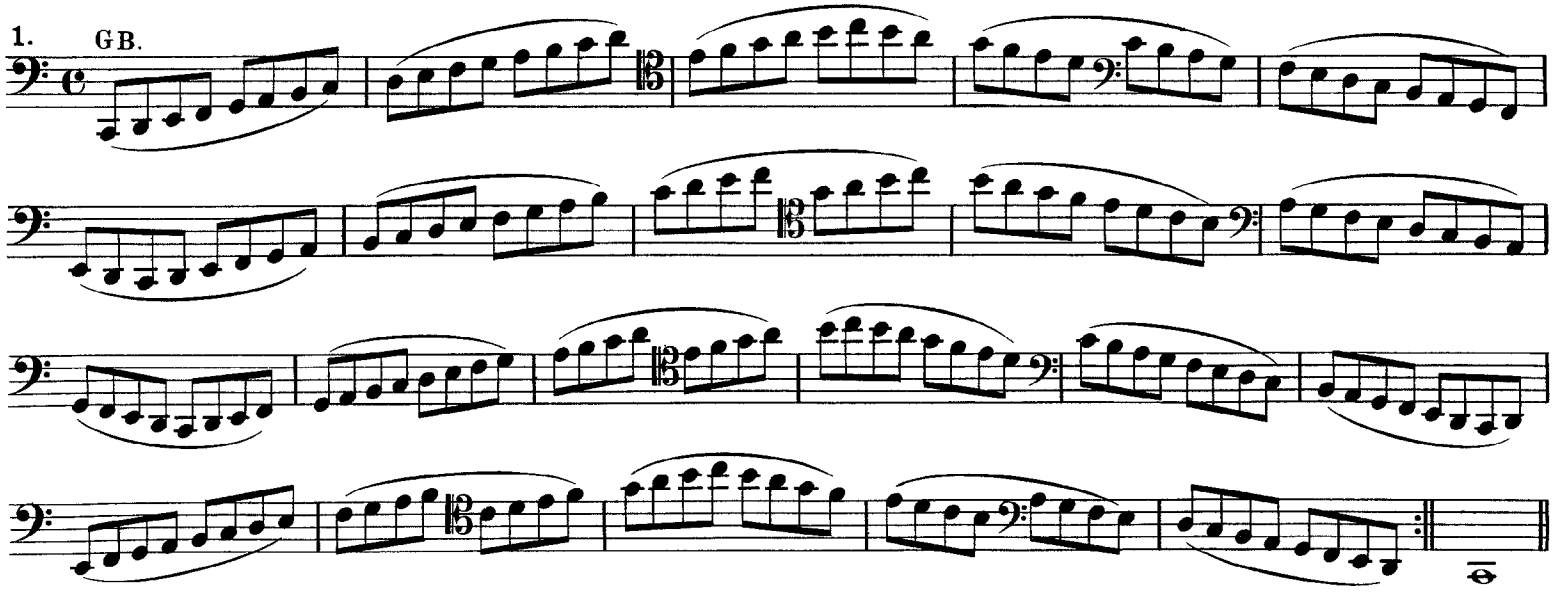

III.ª
III.ª
I.ª
I.ª
I.ª
II.ª
I.ª
III.ª
I.ª

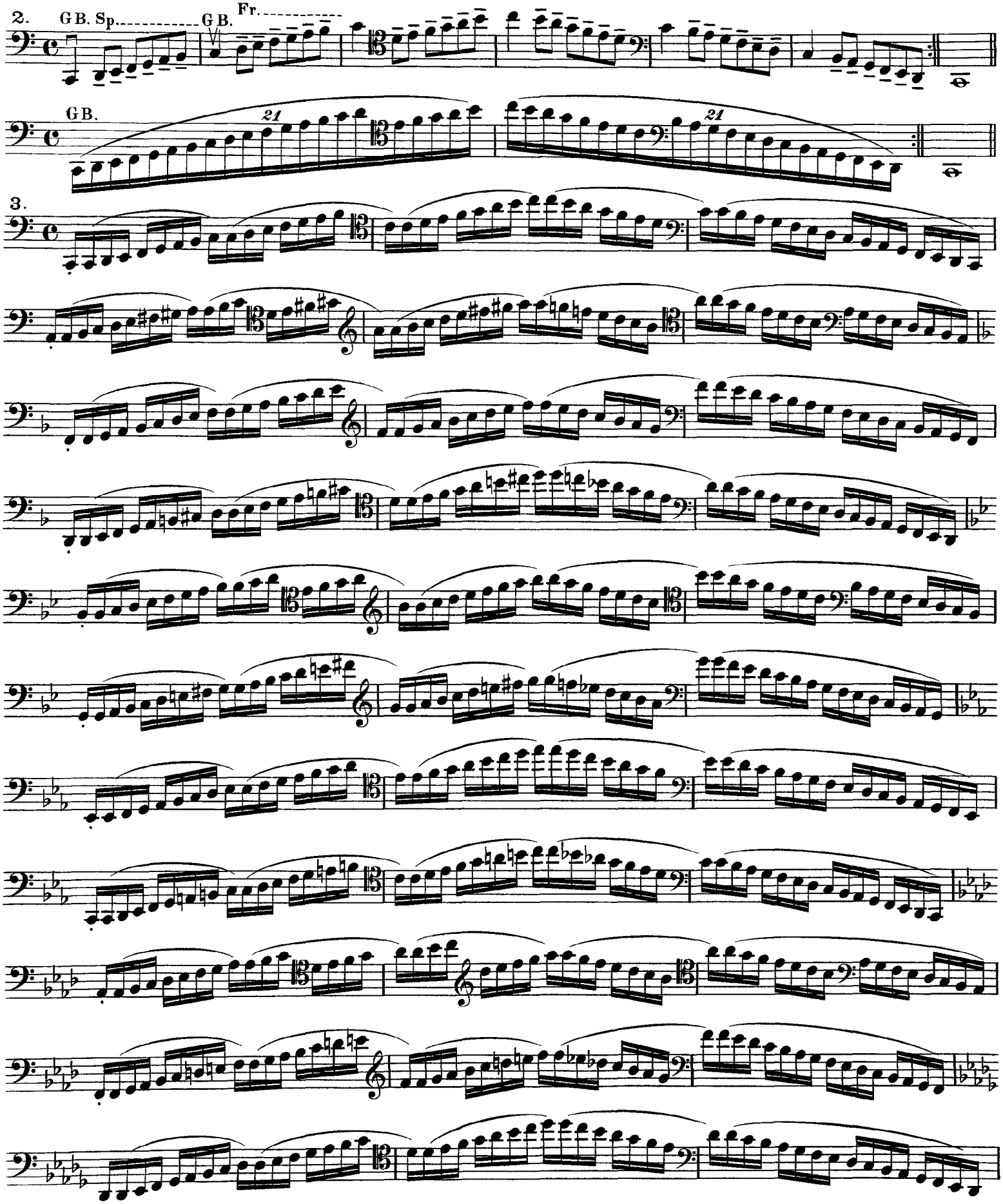


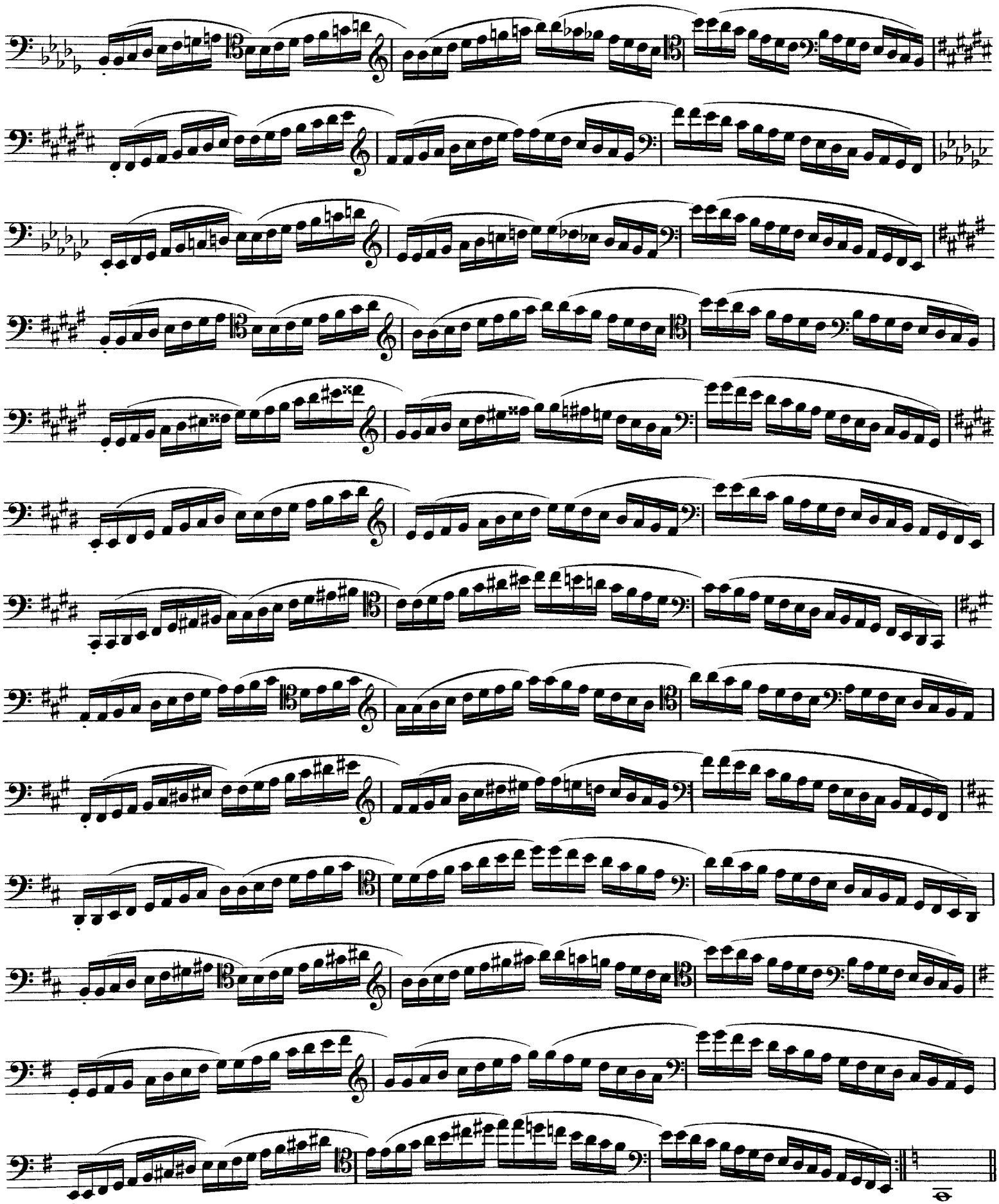
Stricharten zu den Tonleitern in drei Oktaven

Coups d'archets pour les gammes dans l'intervalle de trois octaves

Bowings for scales of three octaves



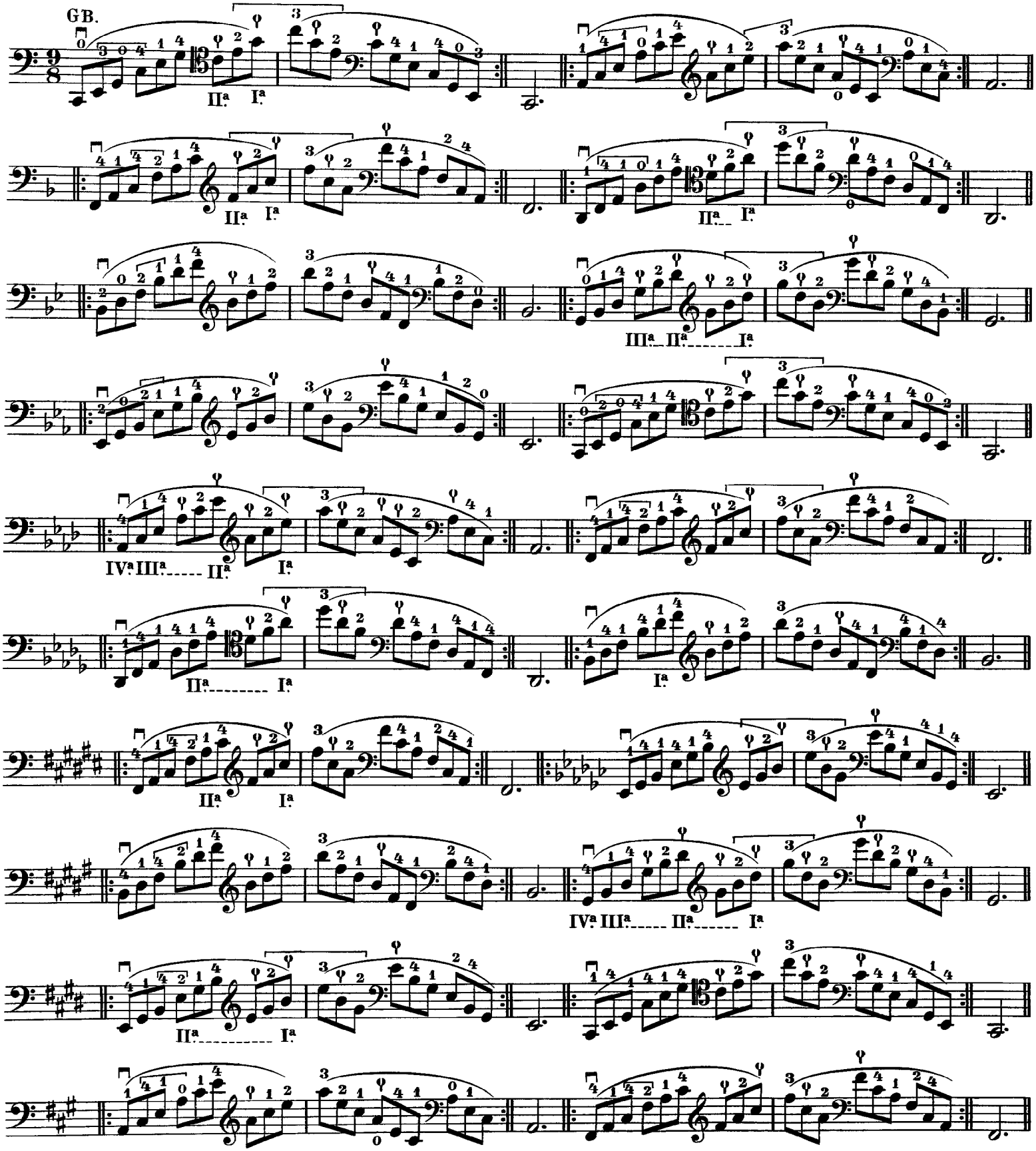

2.
G B. Sp.
G B.
Fr.
G B.
21
21
3.

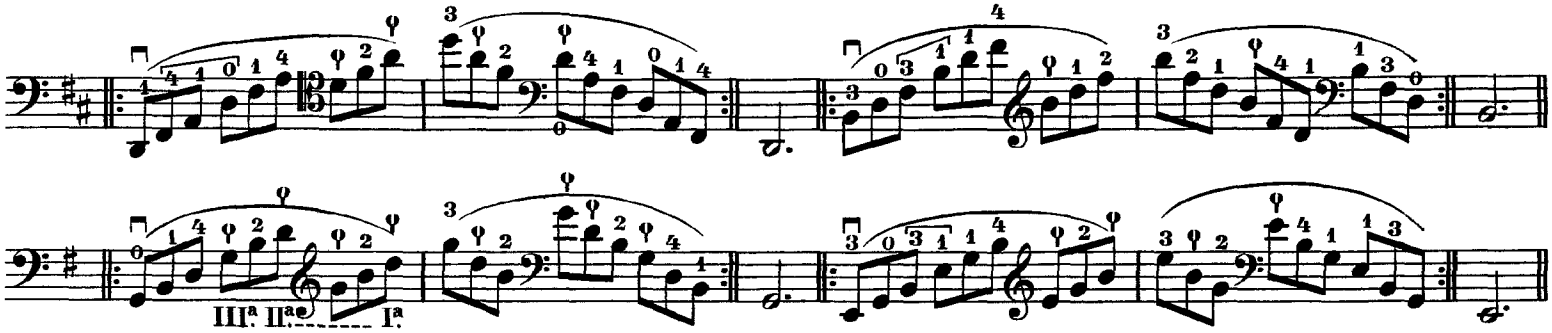


Dreiklänge in drei Oktaven

Accords de trois sons dans l'intervalle de trois octaves

Triads through three octaves

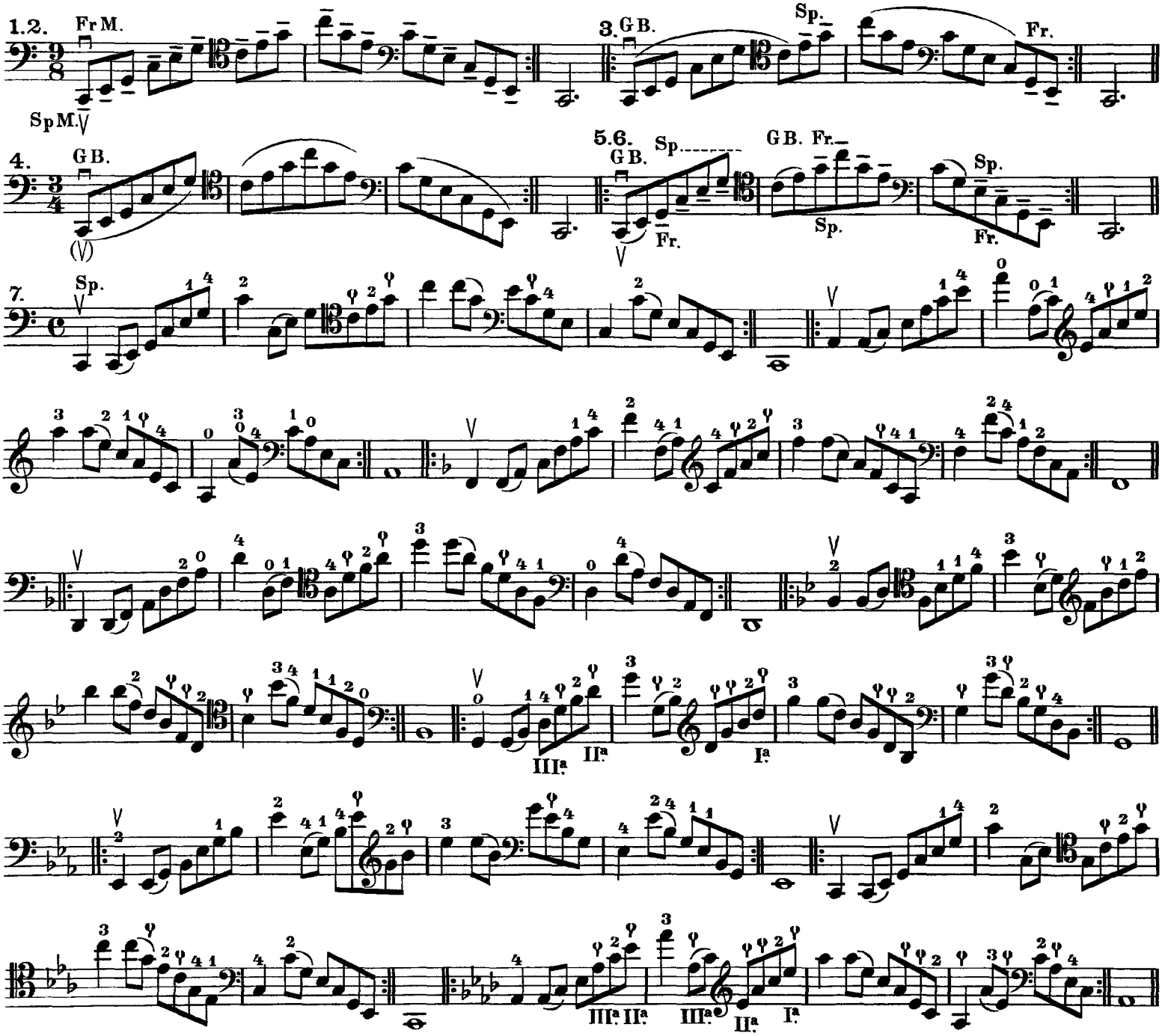


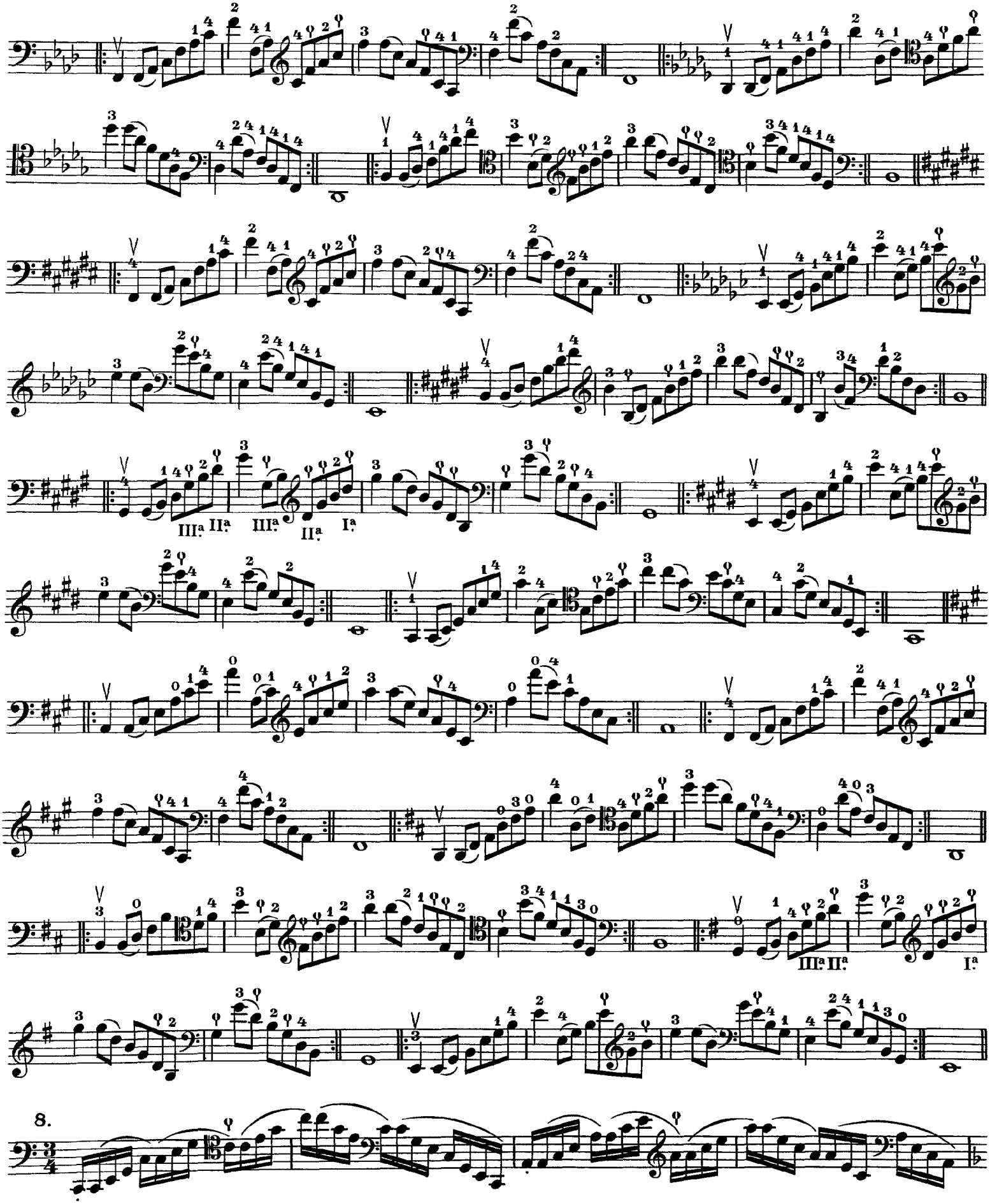


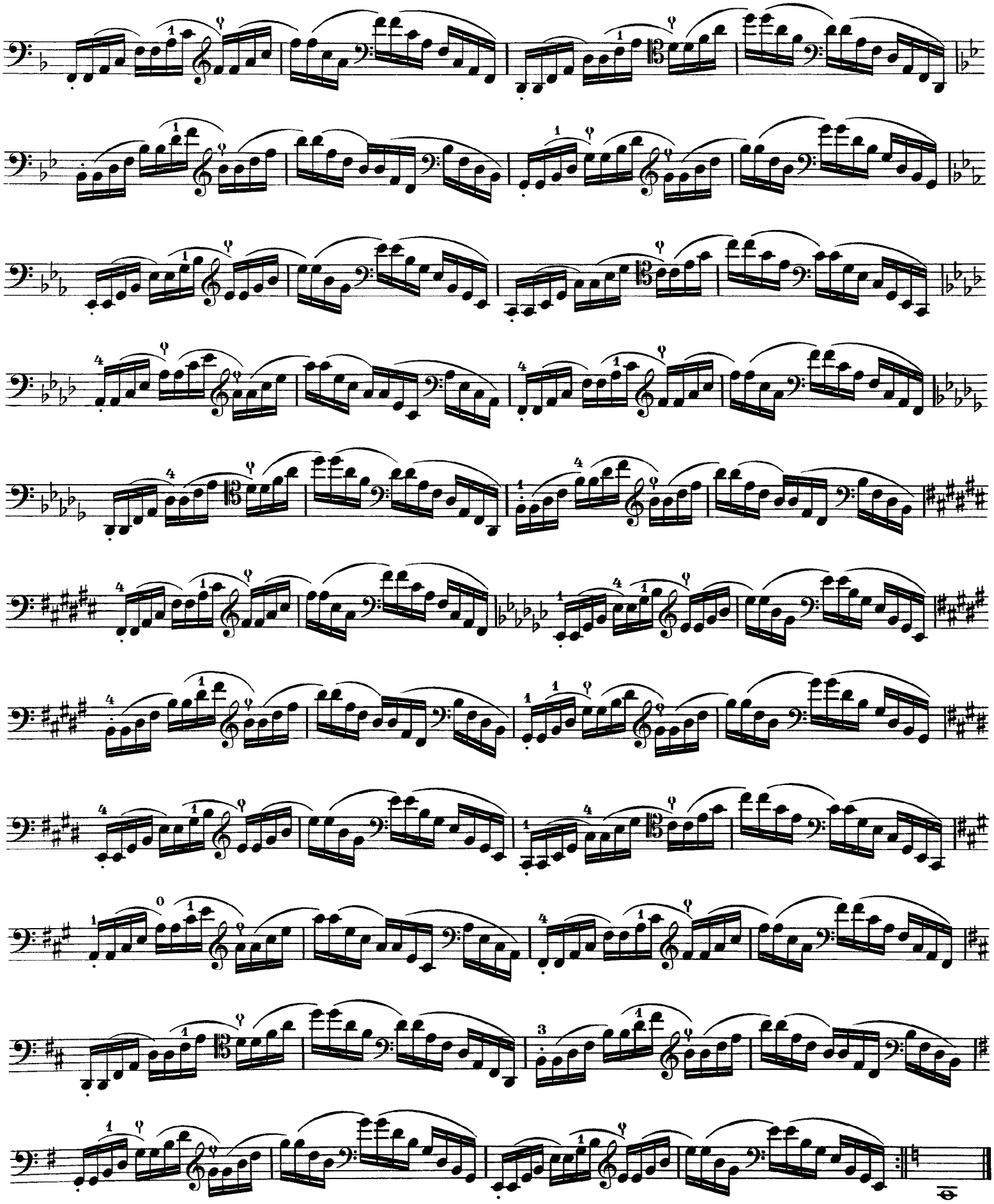
Stricharten für die Dreiklänge in drei Oktaven

Coups d'archets pour les accords de trois sons dans l'intervalle de trois octaves

Bowings for triads through three octaves



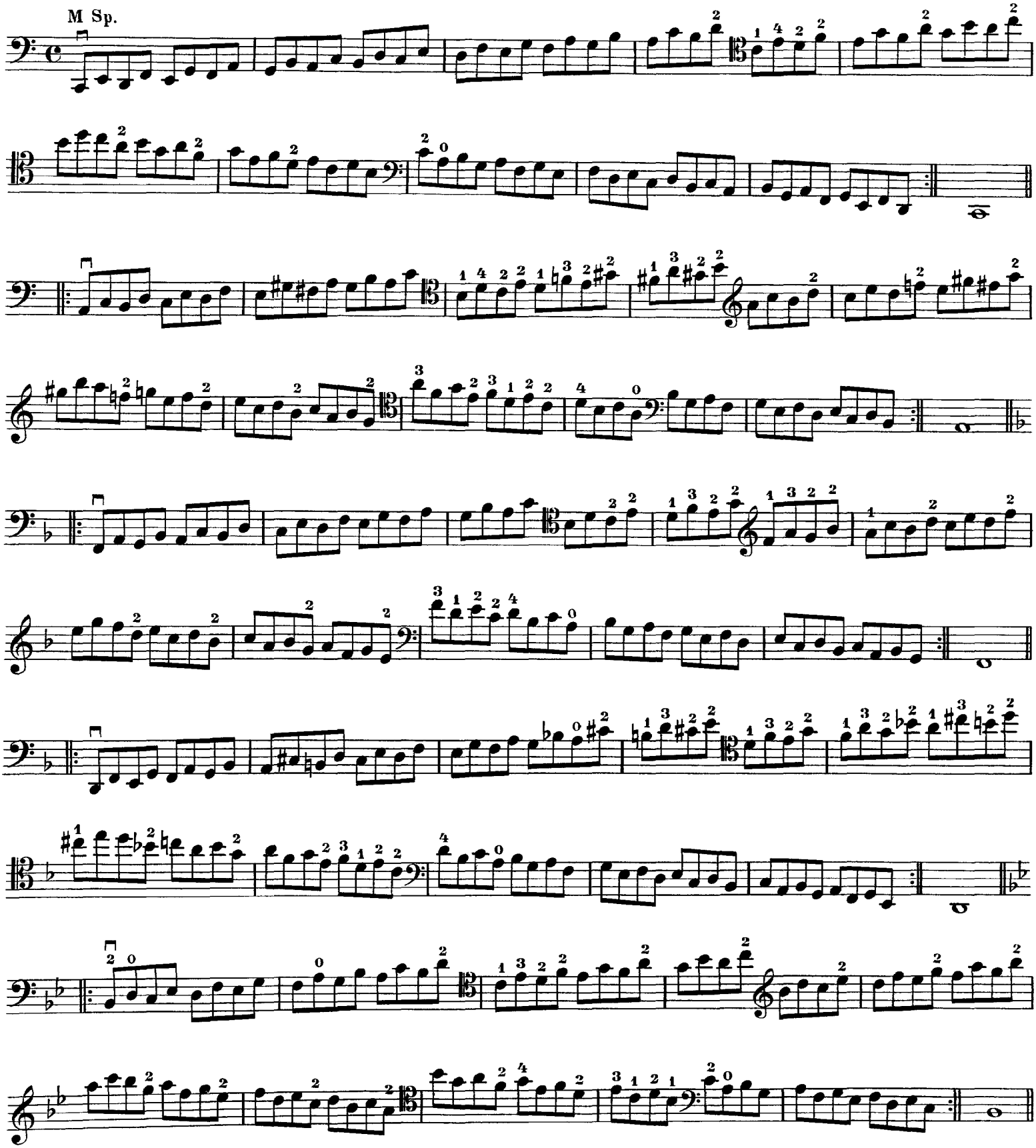

III. II. III. II. I.
III. II. I.
8.

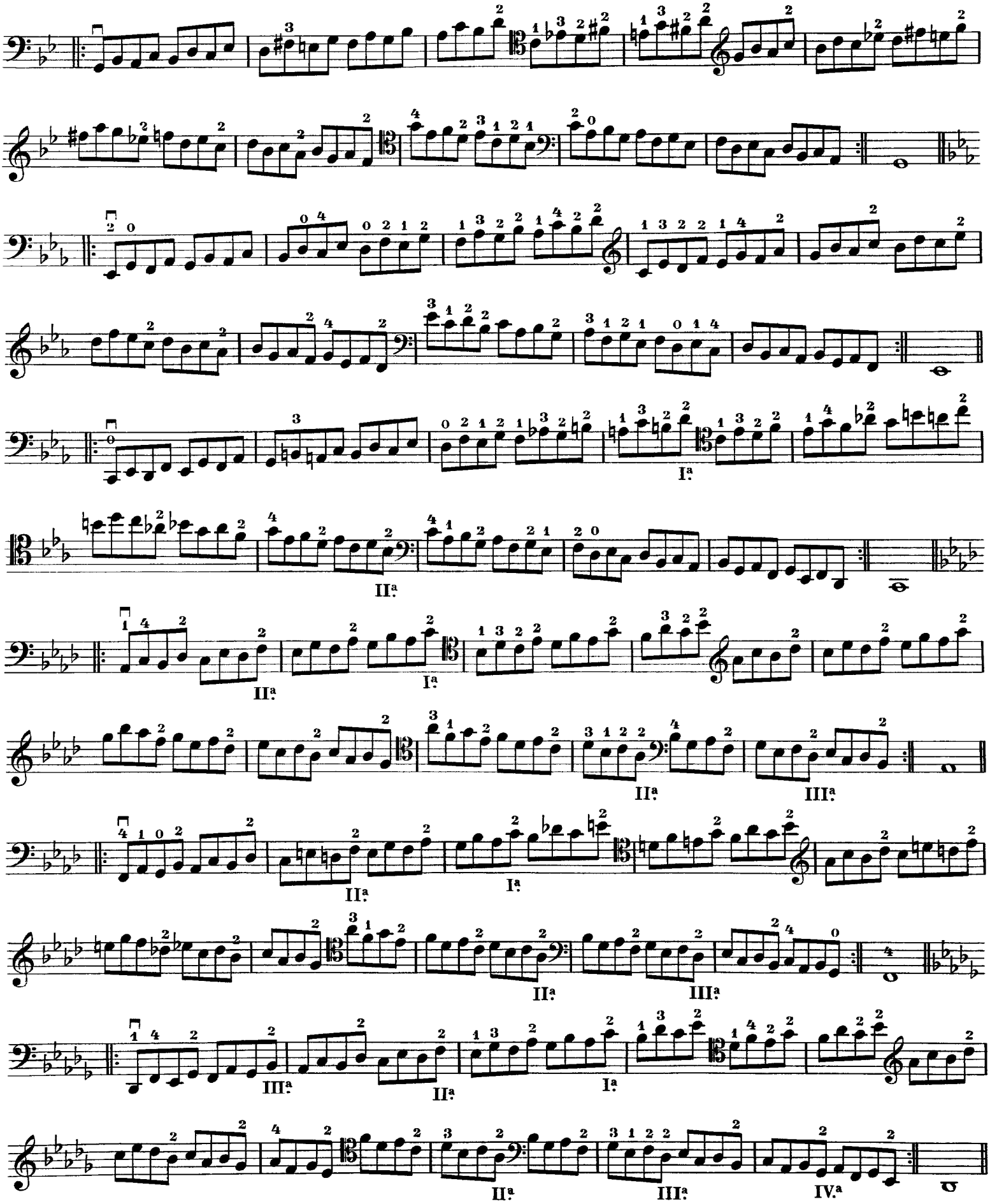


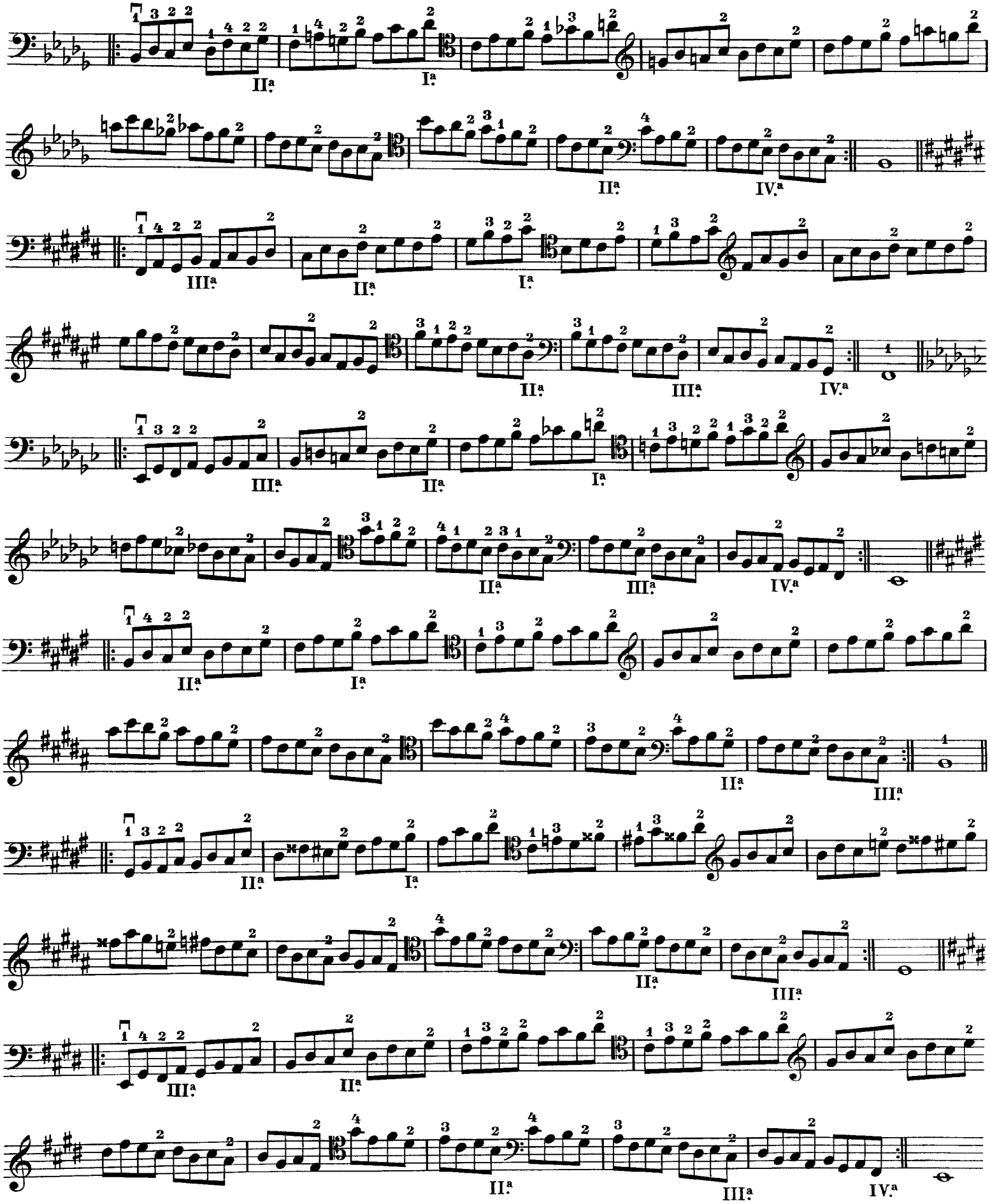
Terzentonleitern in drei Oktaven

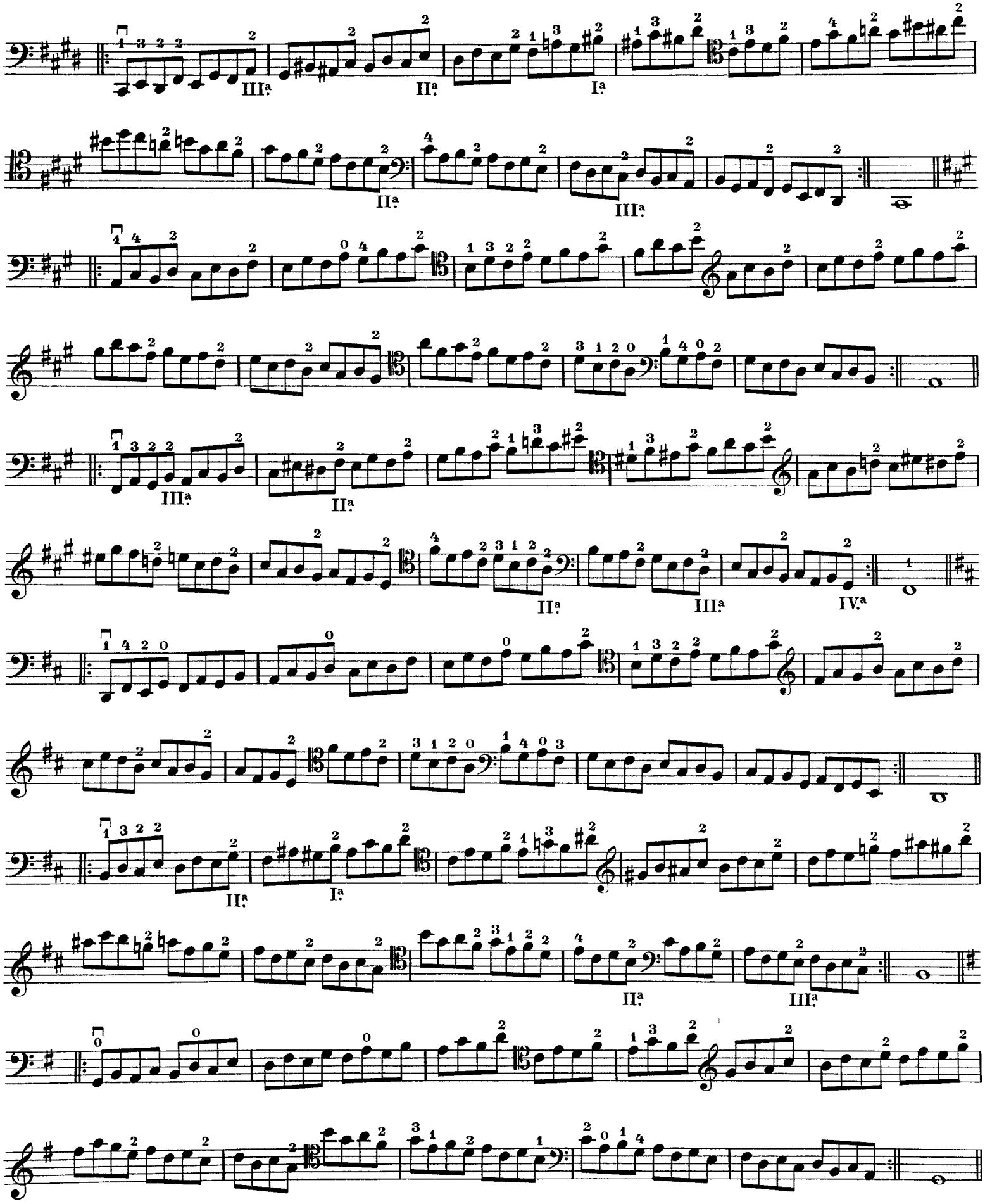
Gammes en tierces dans l'intervalle de trois octaves

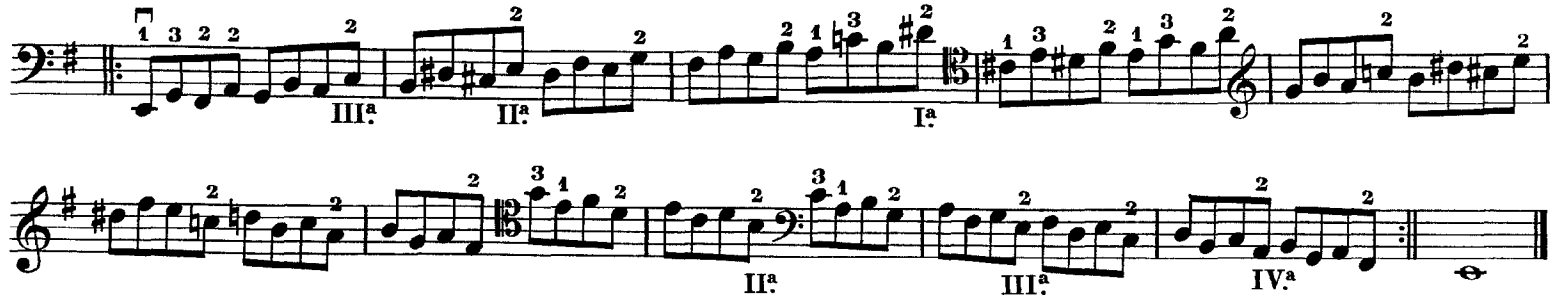
Scales in thirds of three octaves




I.ª
II.ª
I.ª
II.ª
III.ª
II.ª
I.ª
II.ª
III.ª
III.ª
II.ª
I.ª
II.ª
III.ª
IV.ª


IIª.
Iª.
IIª.
IVª.
IIIª.
IIª.
Iª.
IIª.
IIIª.
IVª.
IIIª.
IIª.
Iª.
IIª.
IIIª.
IVª.
IIª.
Iª.
IIª.
IIIª.
IIIª.
IIª.
IIIª.
IVª.

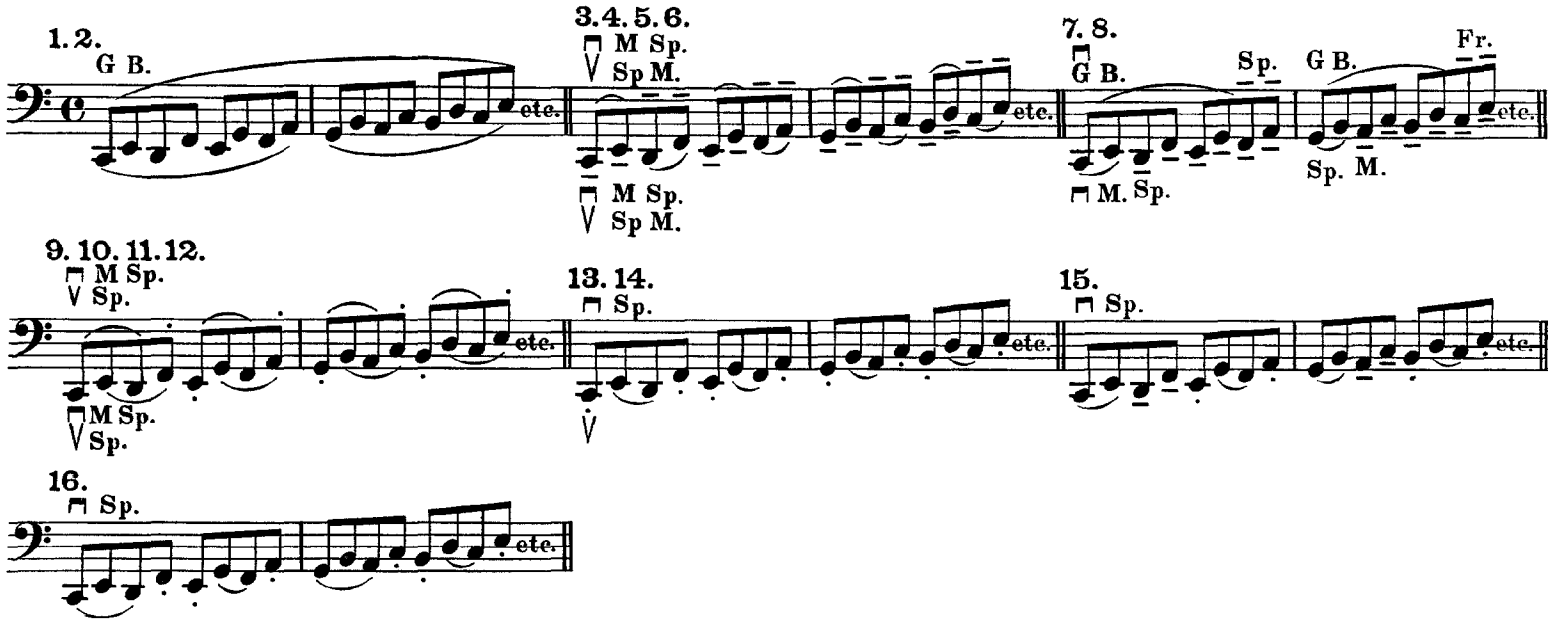

III.ª
II.ª
I.ª
II.ª
III.ª
III.ª
II.ª
II.ª
III.ª
IV.ª
II.ª
I.ª
II.ª
III.ª



Stricharten für die Terzentonleitern in drei Oktaven

Coups d'archets pour les gammes en tierces dans l'intervalle de trois octaves

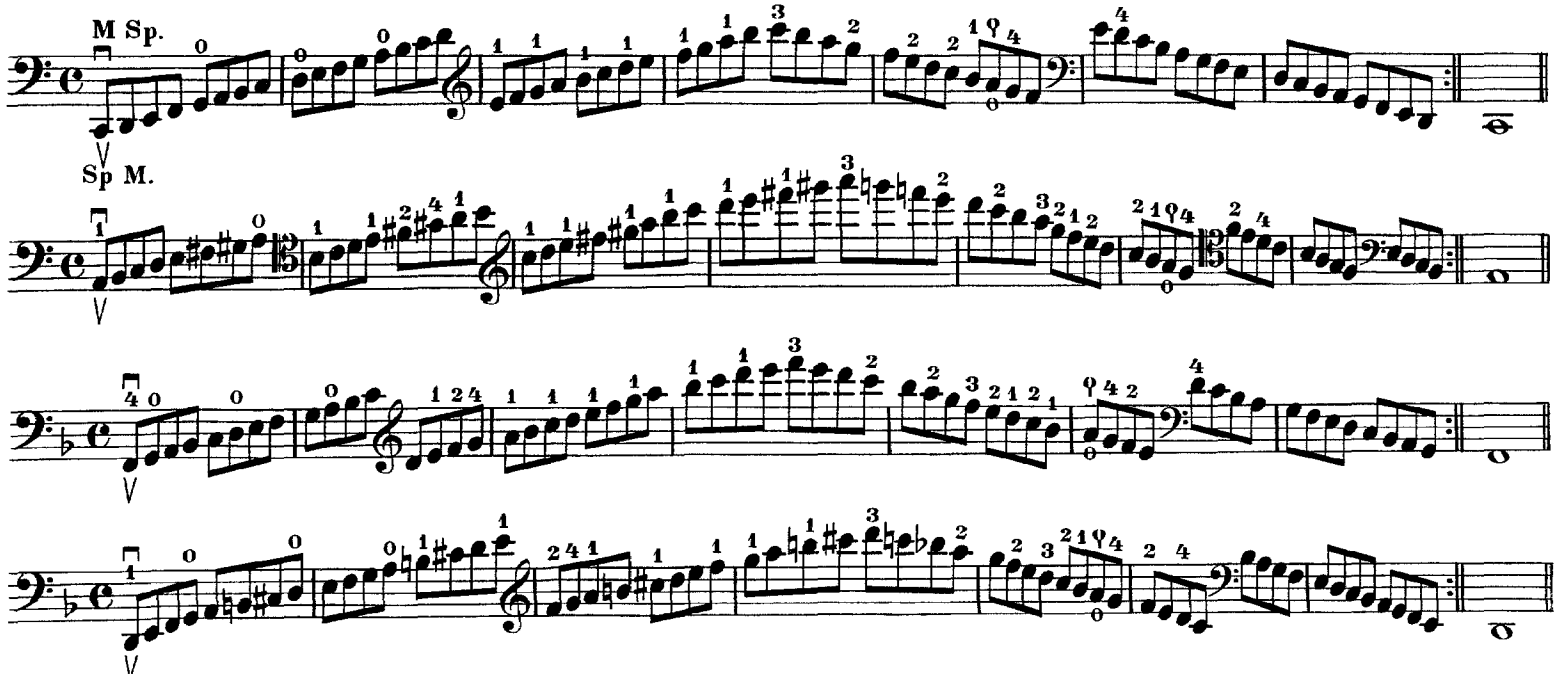
Bowings for scales in thirds of three octaves

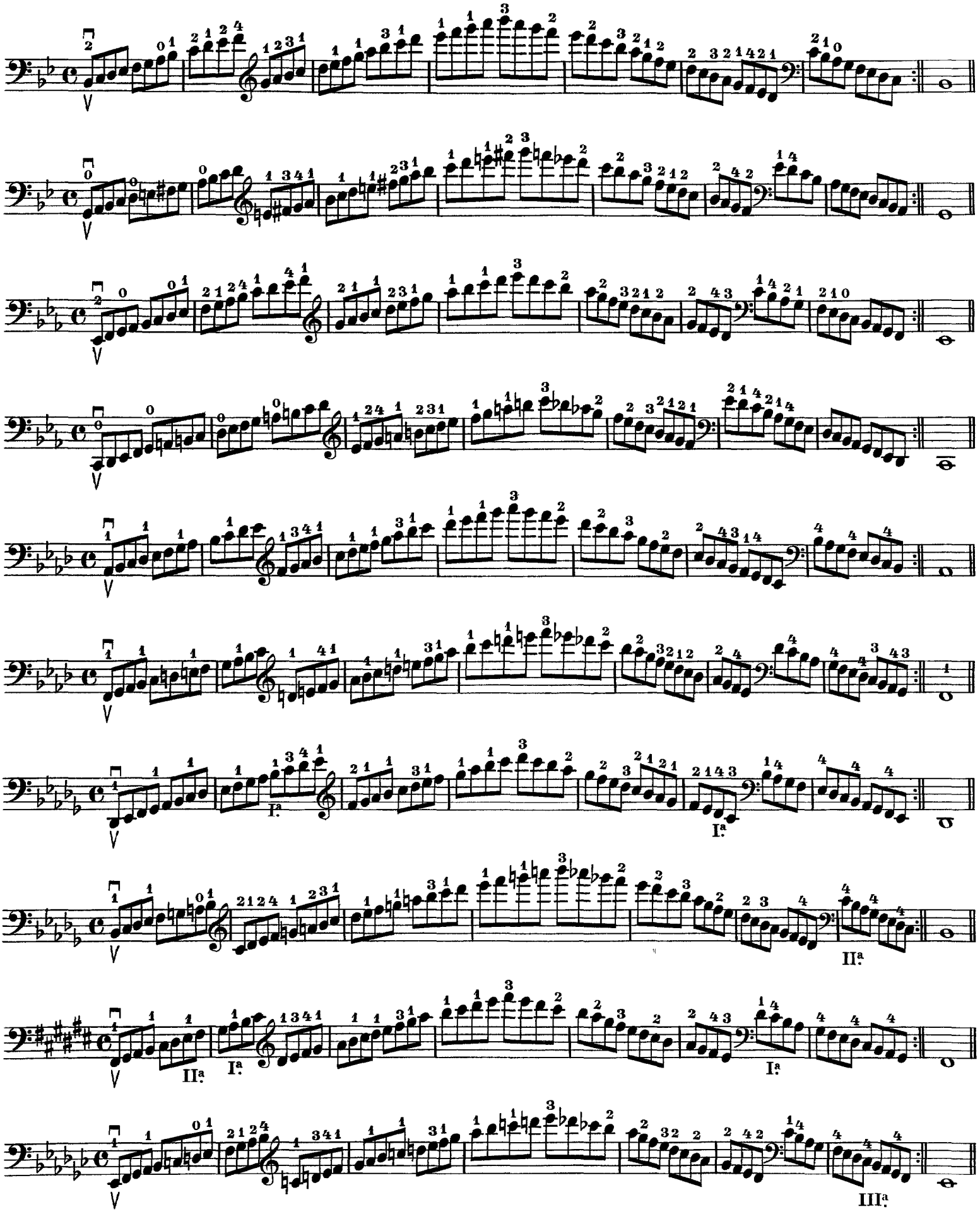


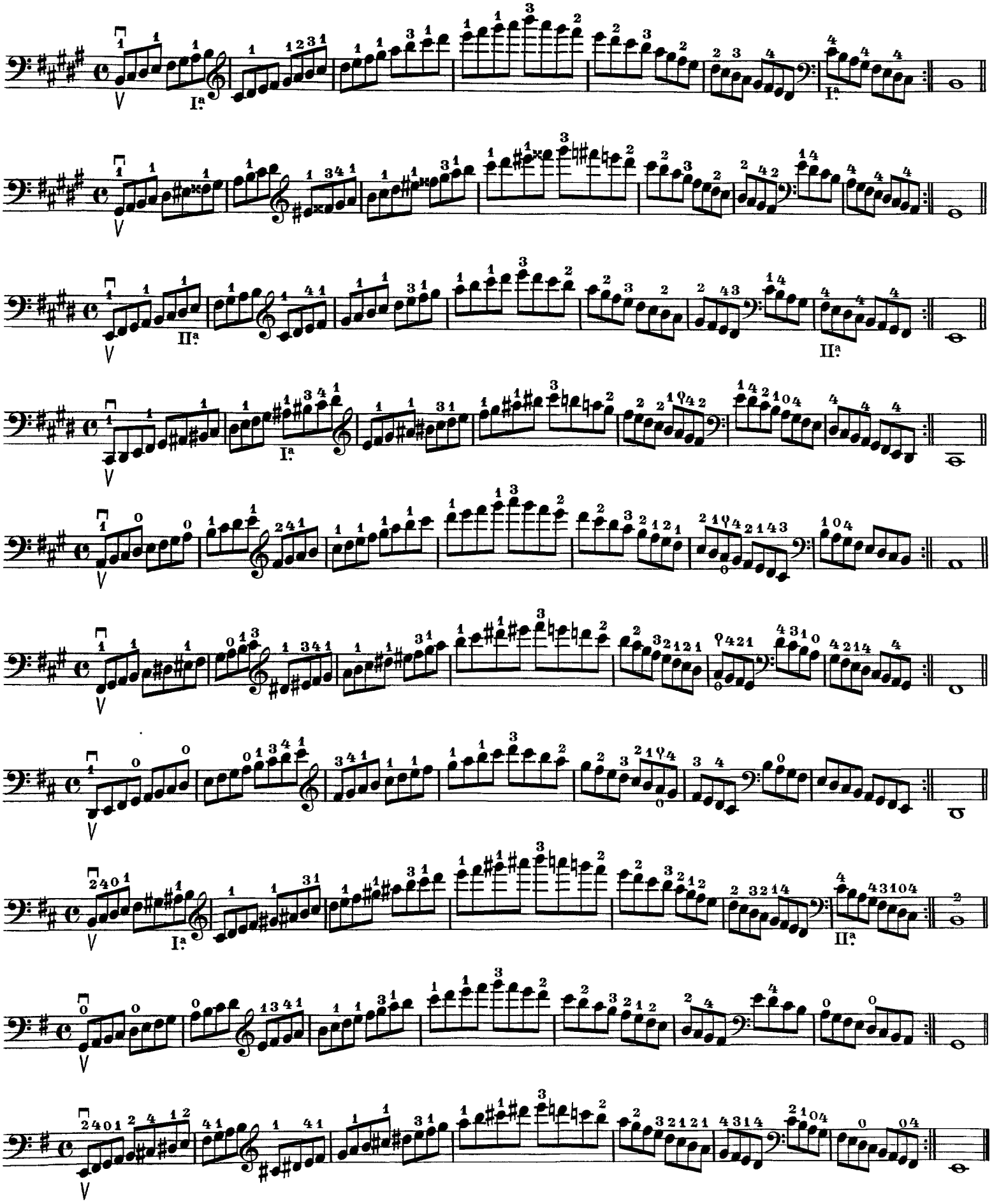
Tonleitern in vier Oktaven

Gammes dans l'intervalle de quatre octaves

Scales in four octaves



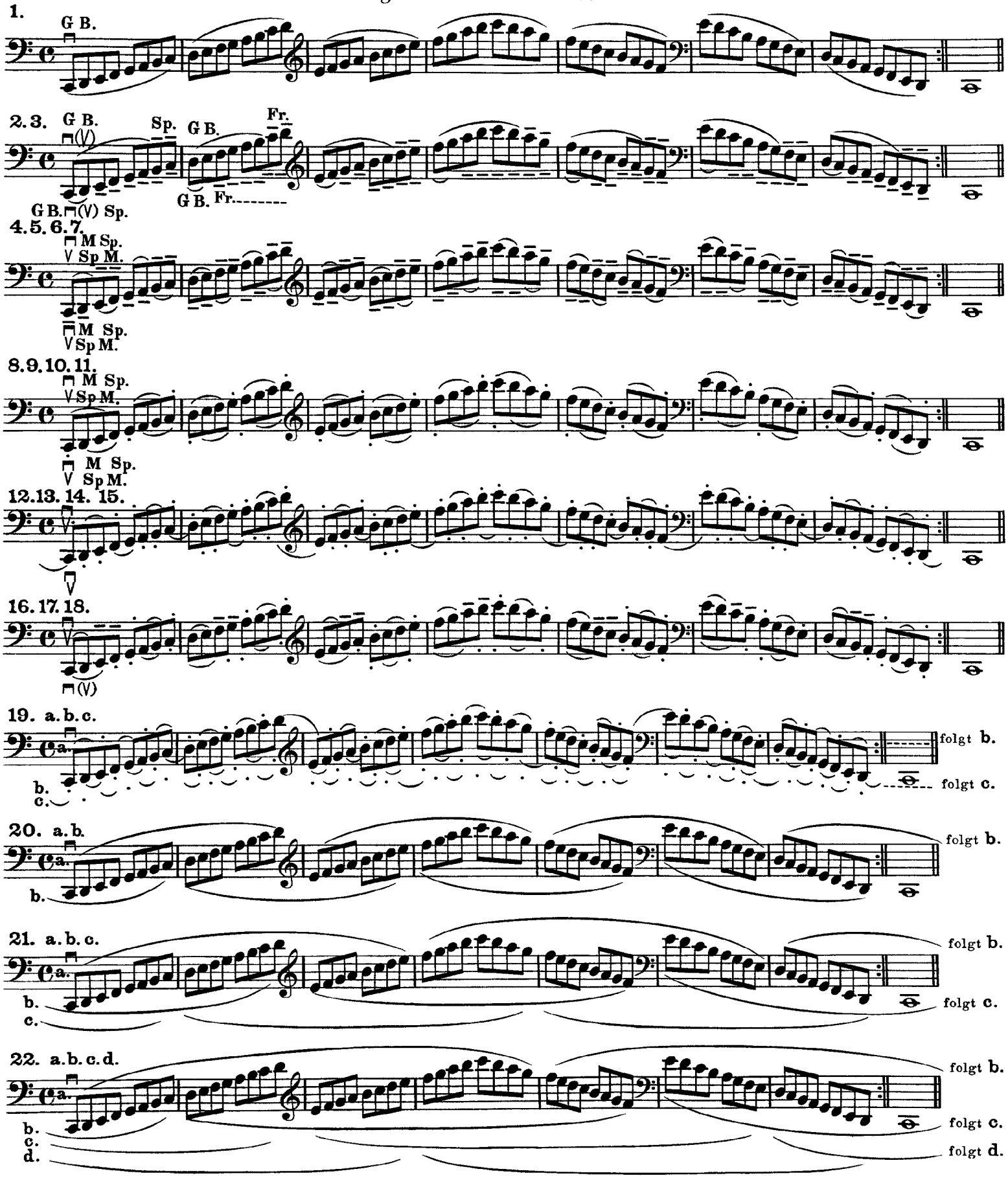

I.ª
I.ª
II.ª
II.ª
I.ª
III.ª

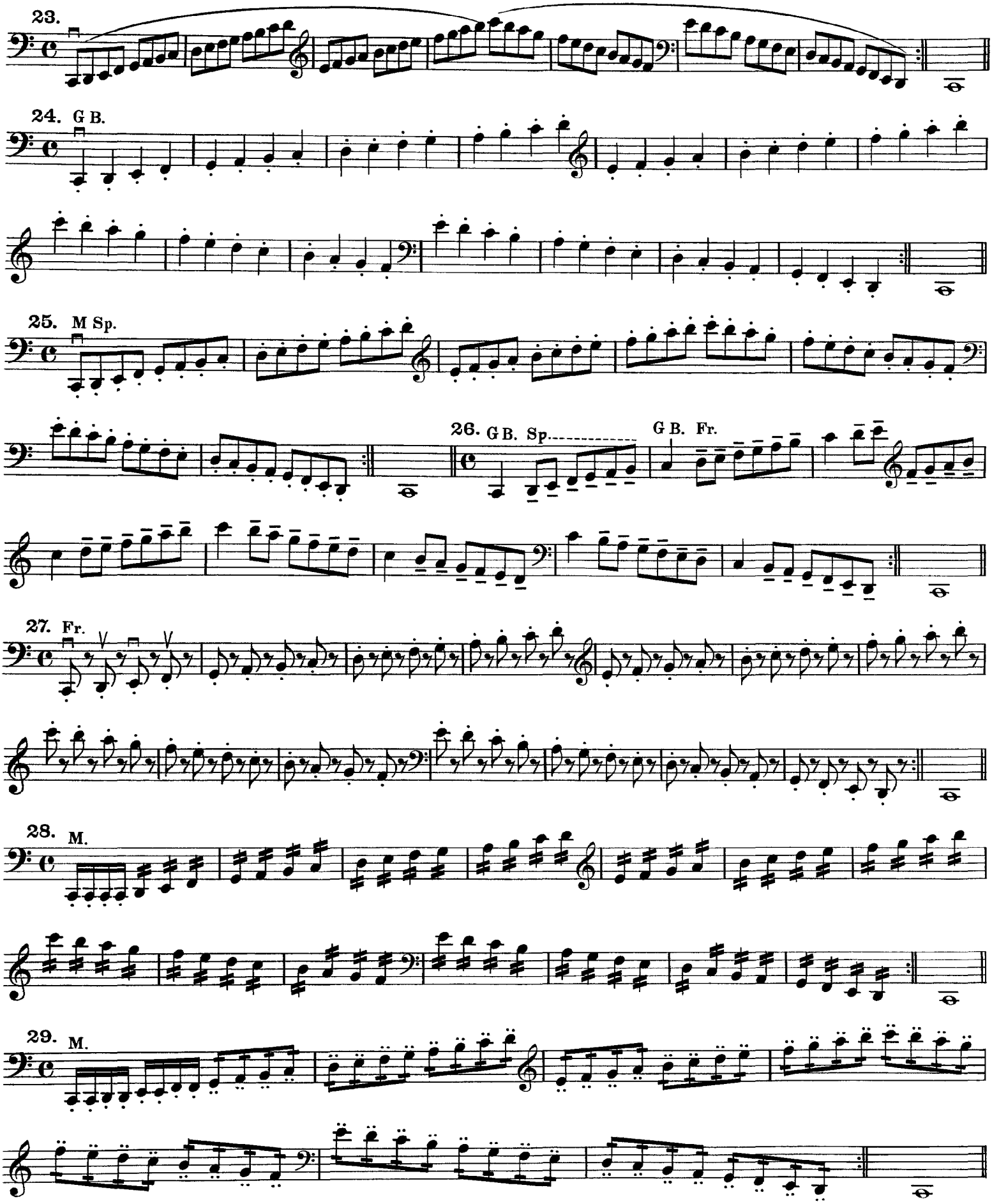

V
Ia
V
Ia
V
IIa
IIa
V
Ia
V
V
V
Ia
IIa
V
V
V
V

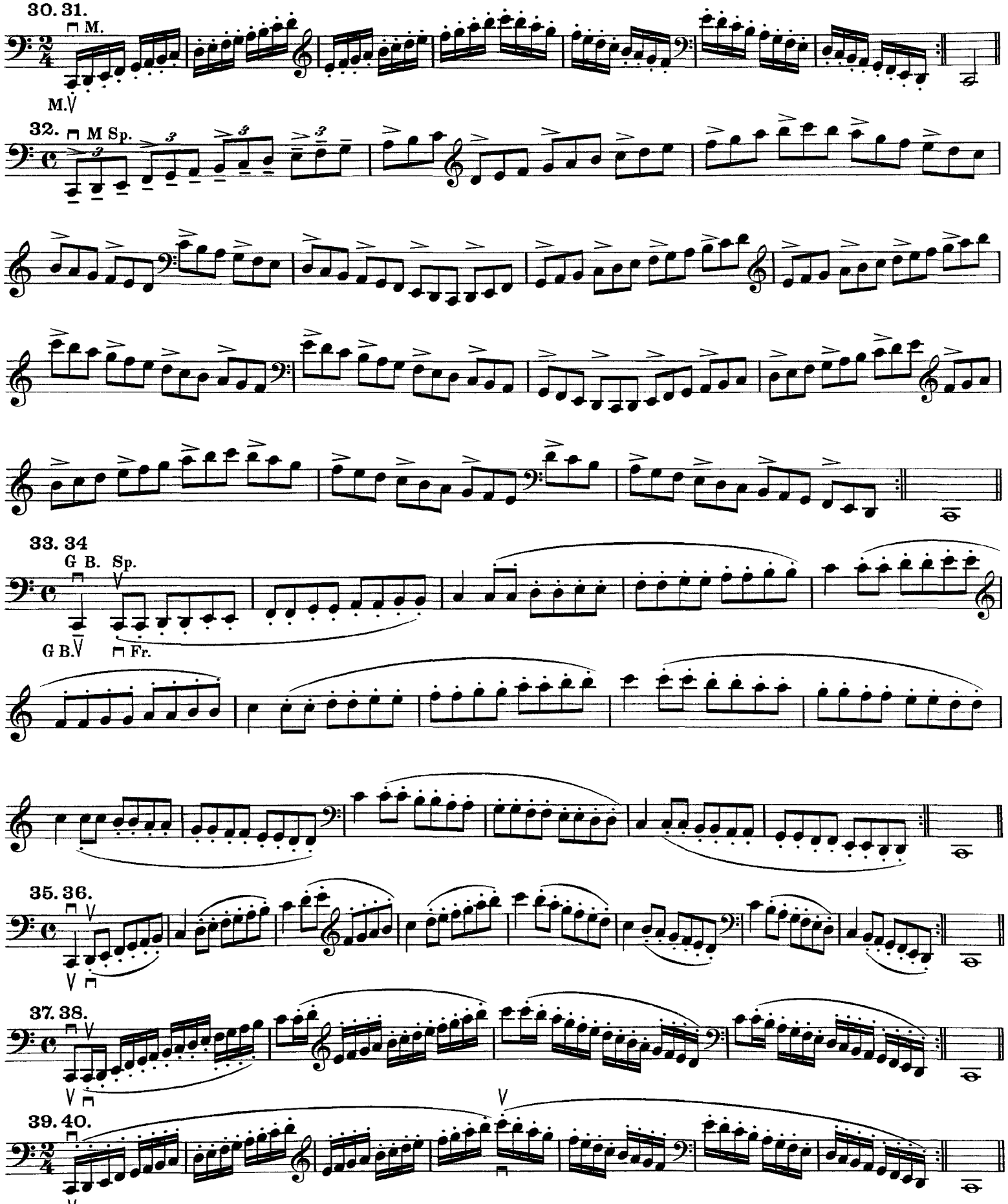
Stricharten für die Tonleitern in vier Oktaven

Coups d'archets pour les gammes dans l'intervalle de quatre octaves

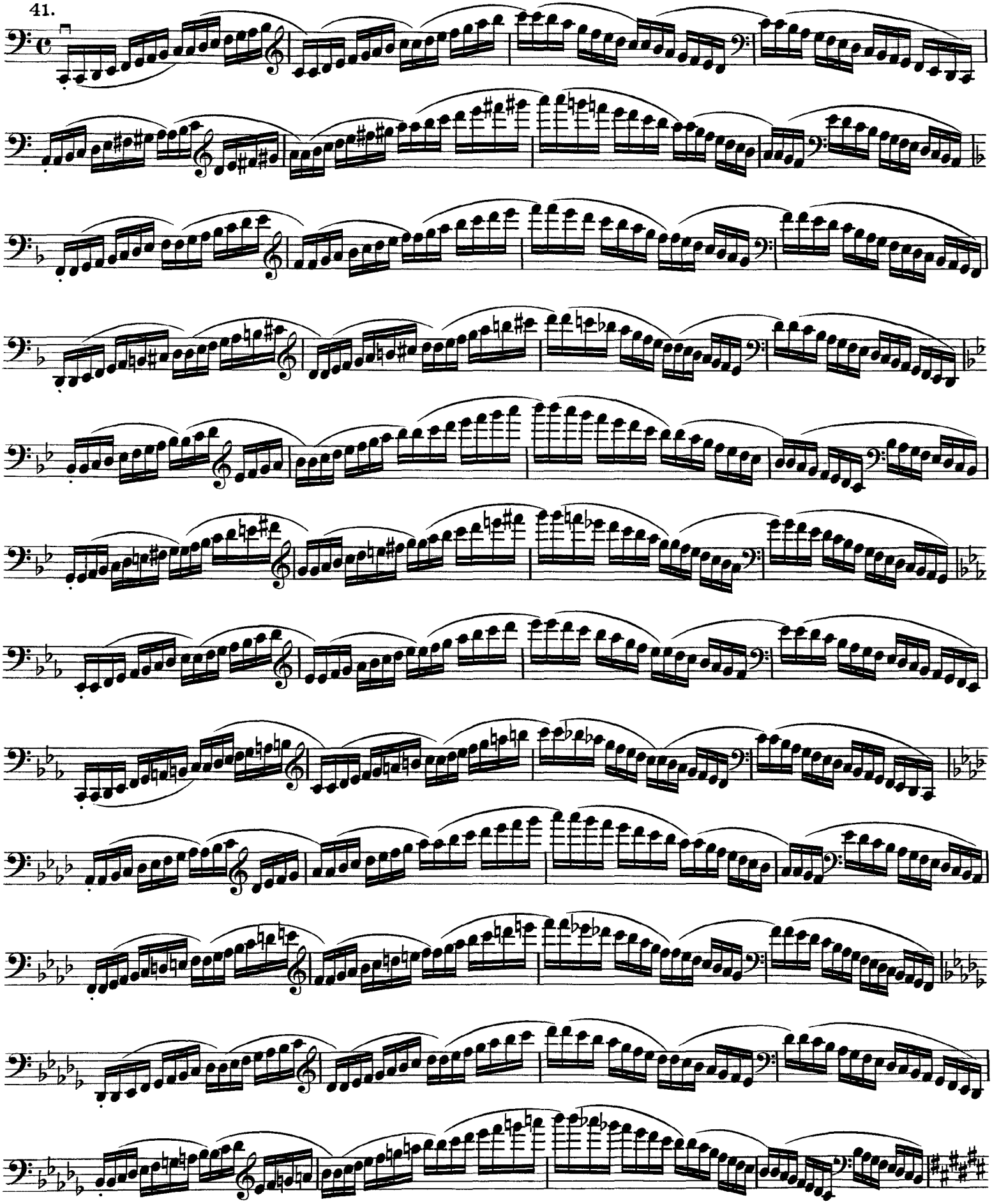
Bowings for scales of four octaves

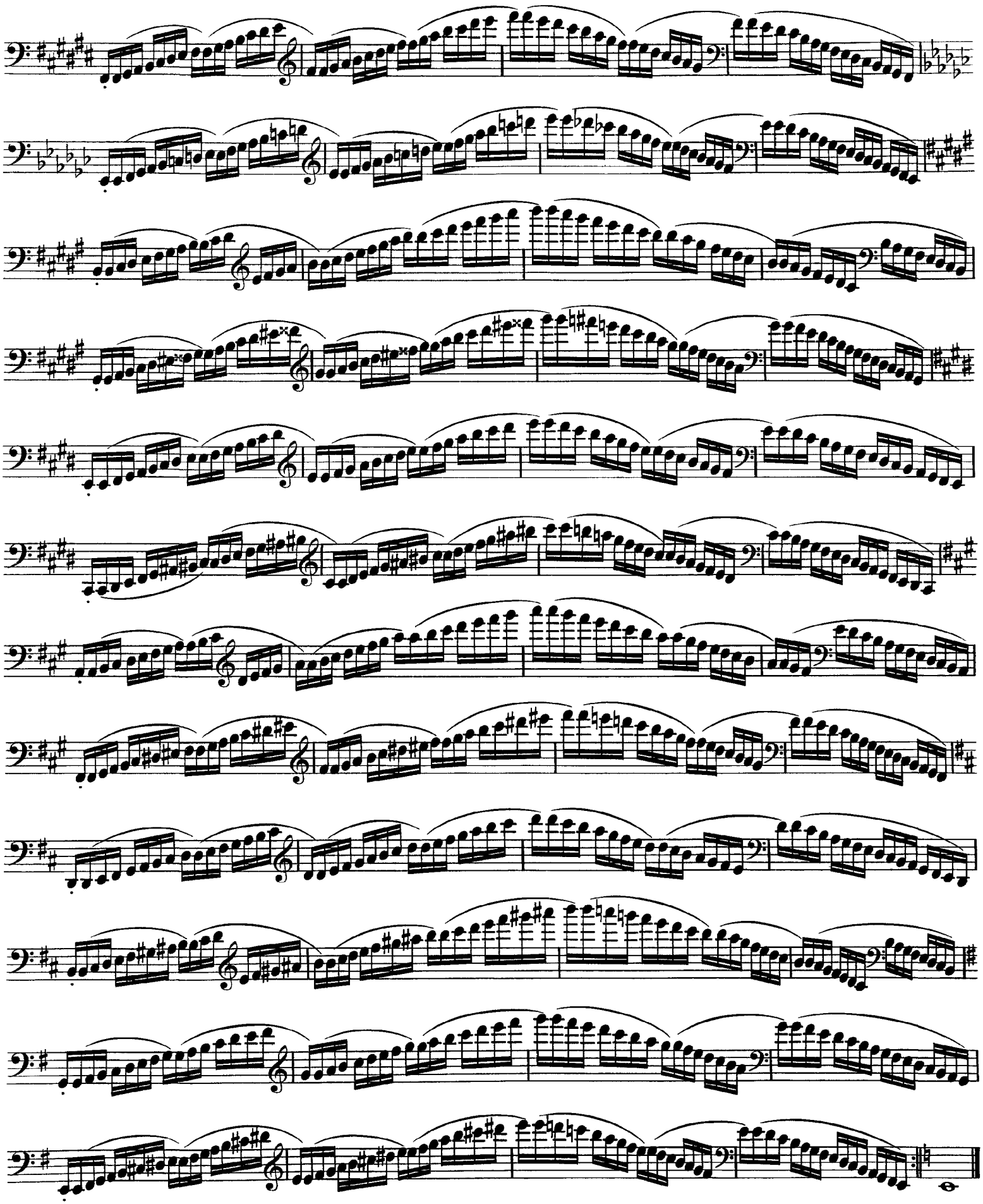



23.
24. G B.
25. M Sp.
26. G B. Sp.
G B. Fr.
27. Fr.
28. M.
29. M.


30. 31.
M.
M.
32.
M Sp.
33. 34
G B.
Sp.
G B.
Fr.
35. 36.
37. 38.
39. 40.

41.

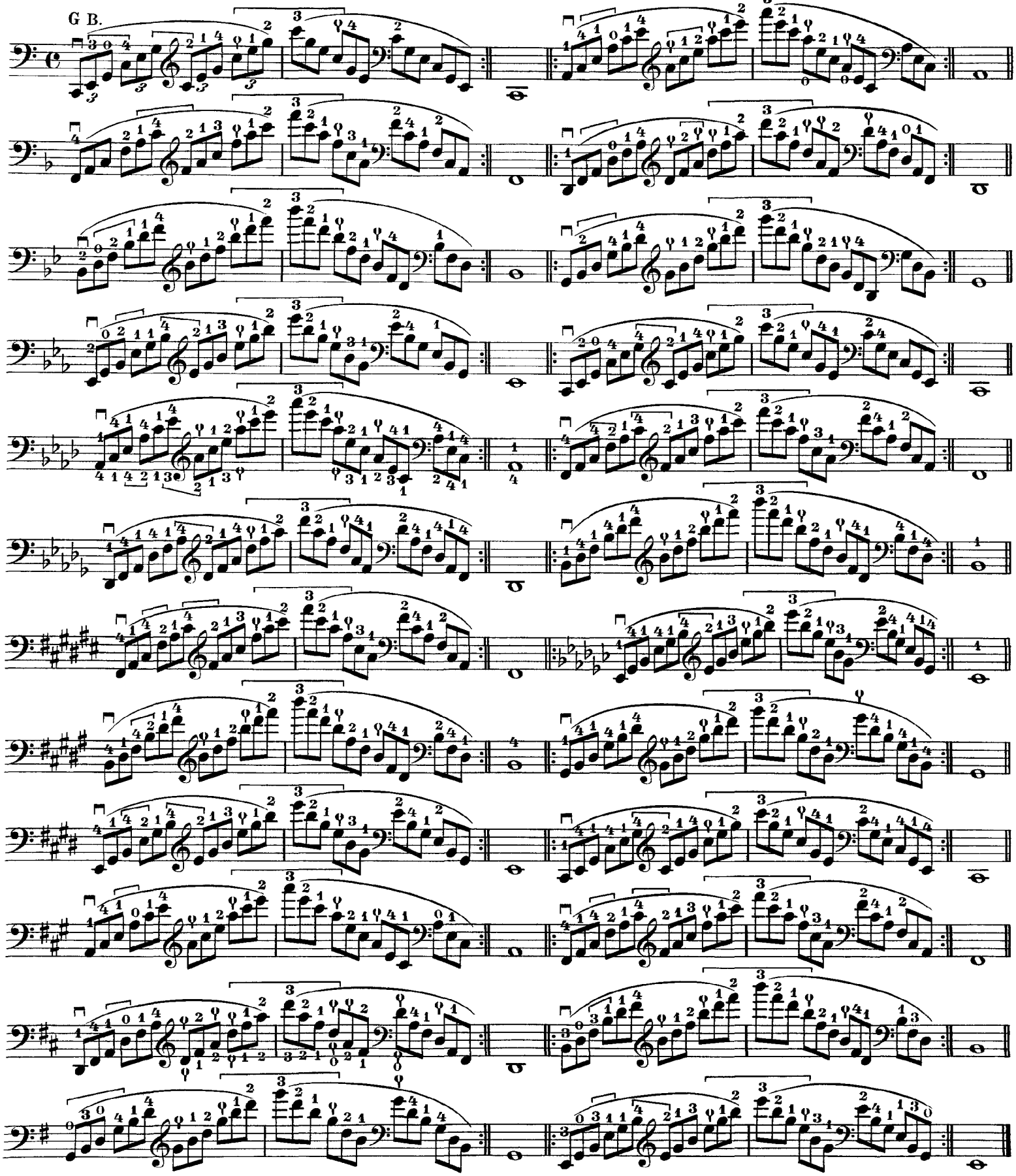




Dreiklänge in vier Oktaven

Accords de trois sons dans l'intervalle de quatre octaves

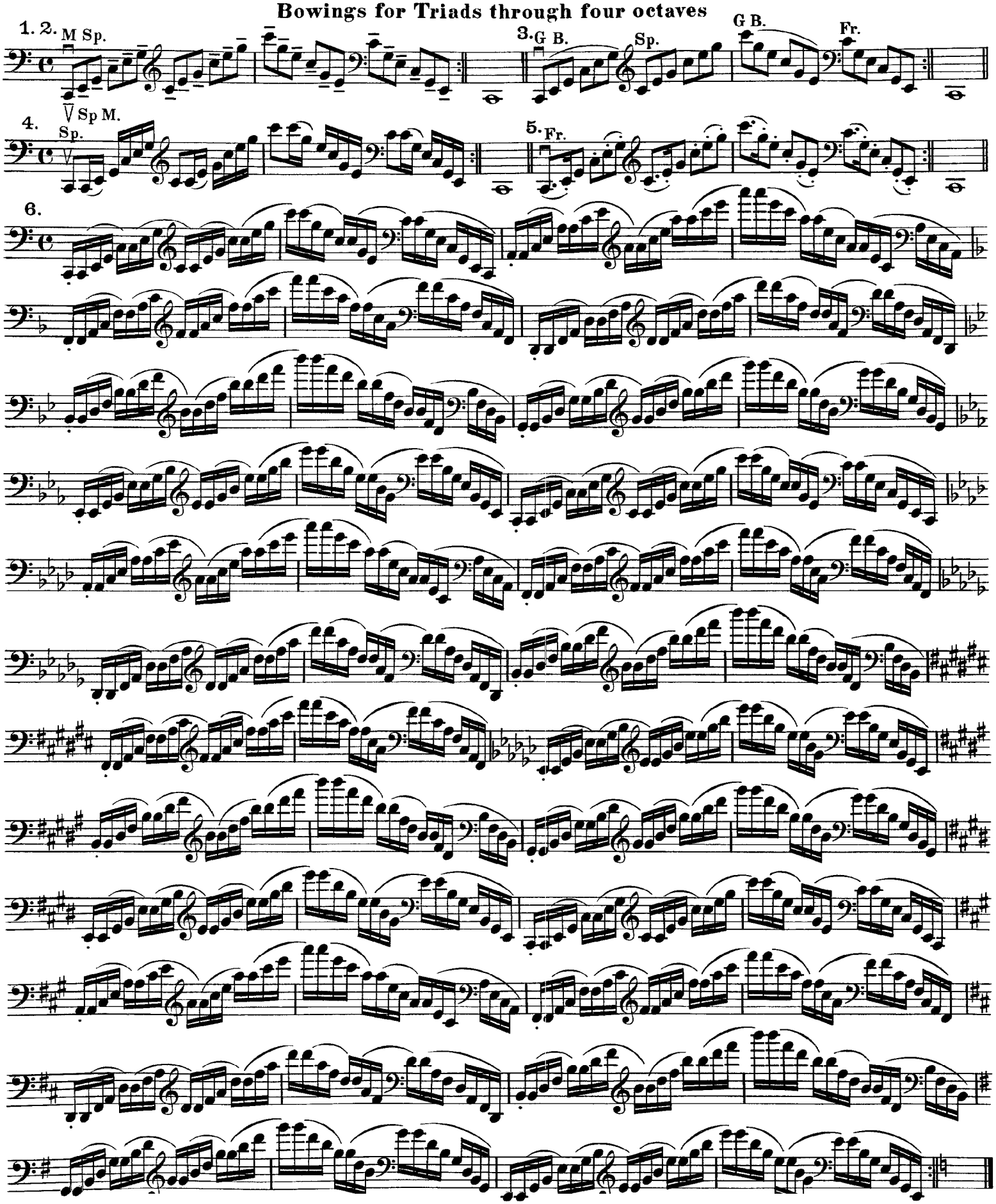
Triads through four octaves



Stricharten für die Dreiklänge in vier Oktaven

Coups d'archets pour les accords de trois sons dans l'intervalle de quatre octaves

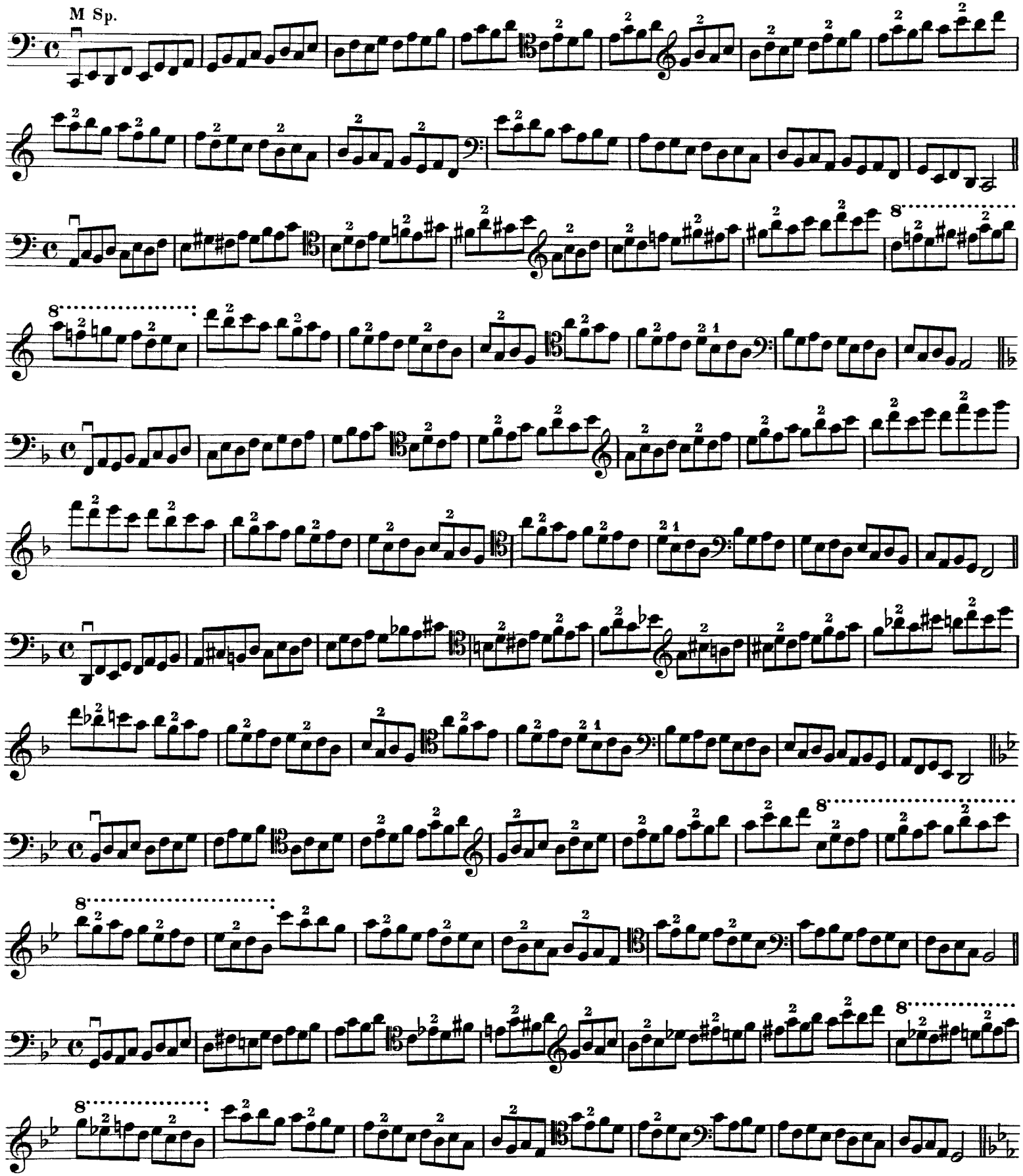
Bowings for Triads through four octaves

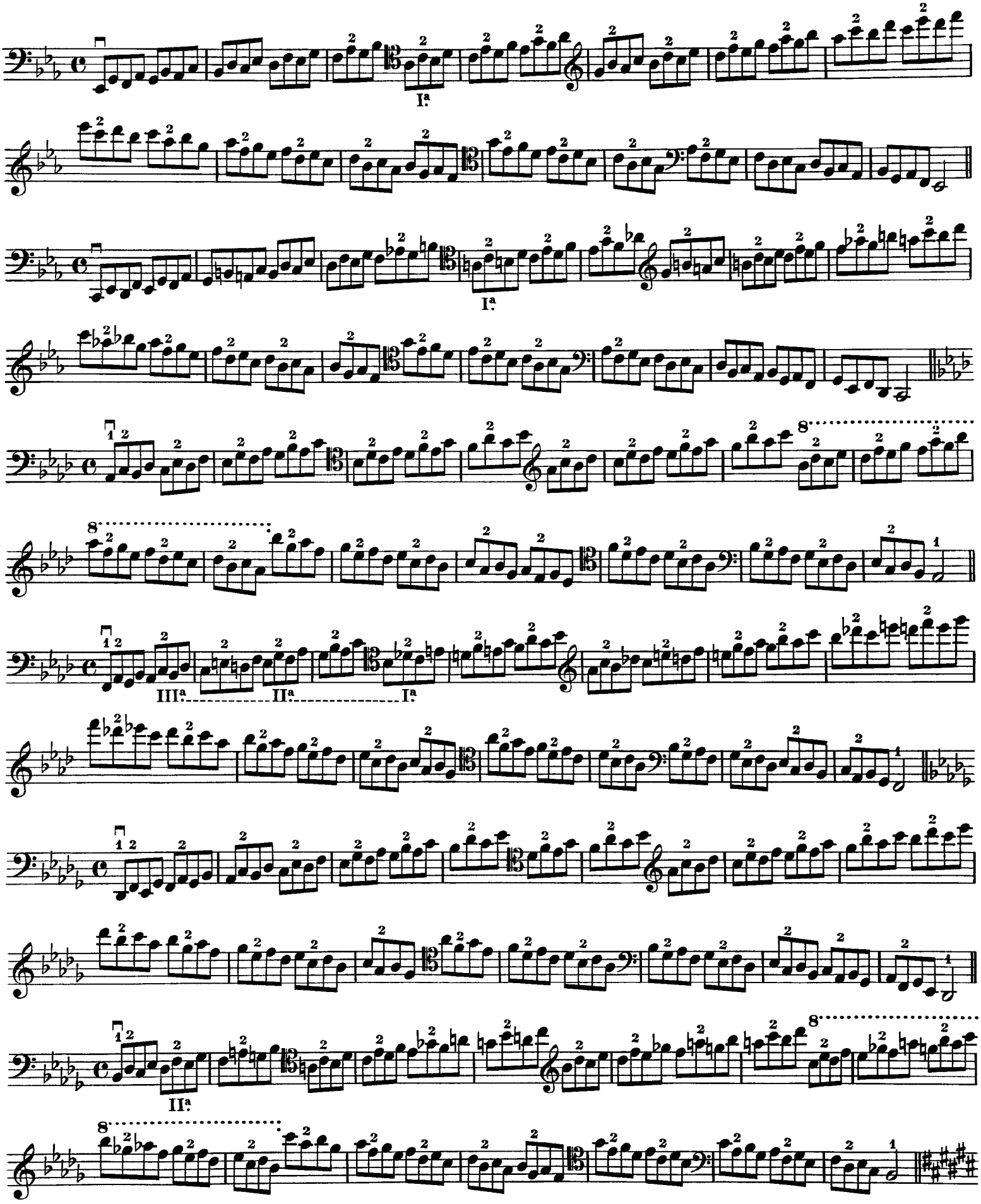


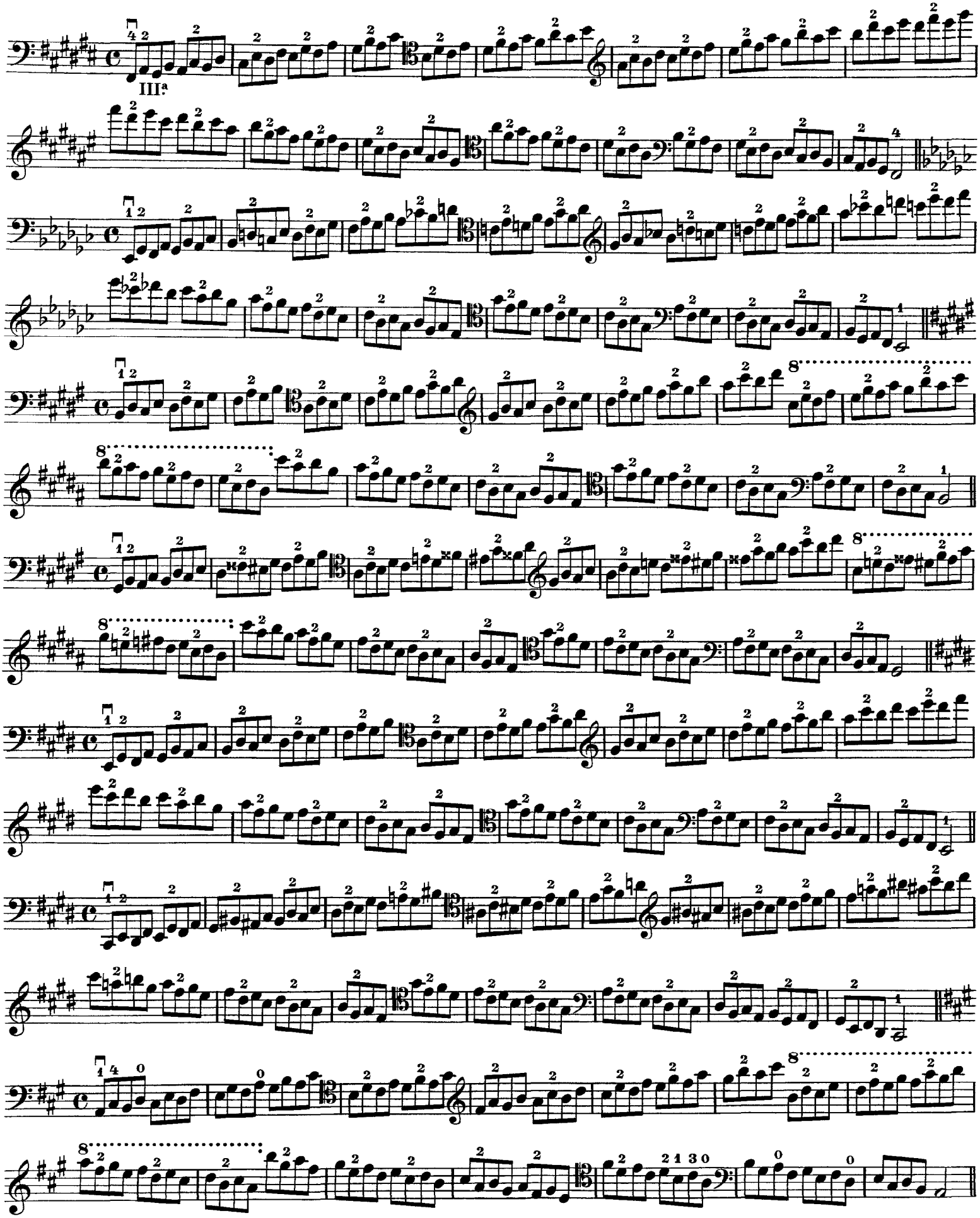
Terzentonleitern in vier Oktaven

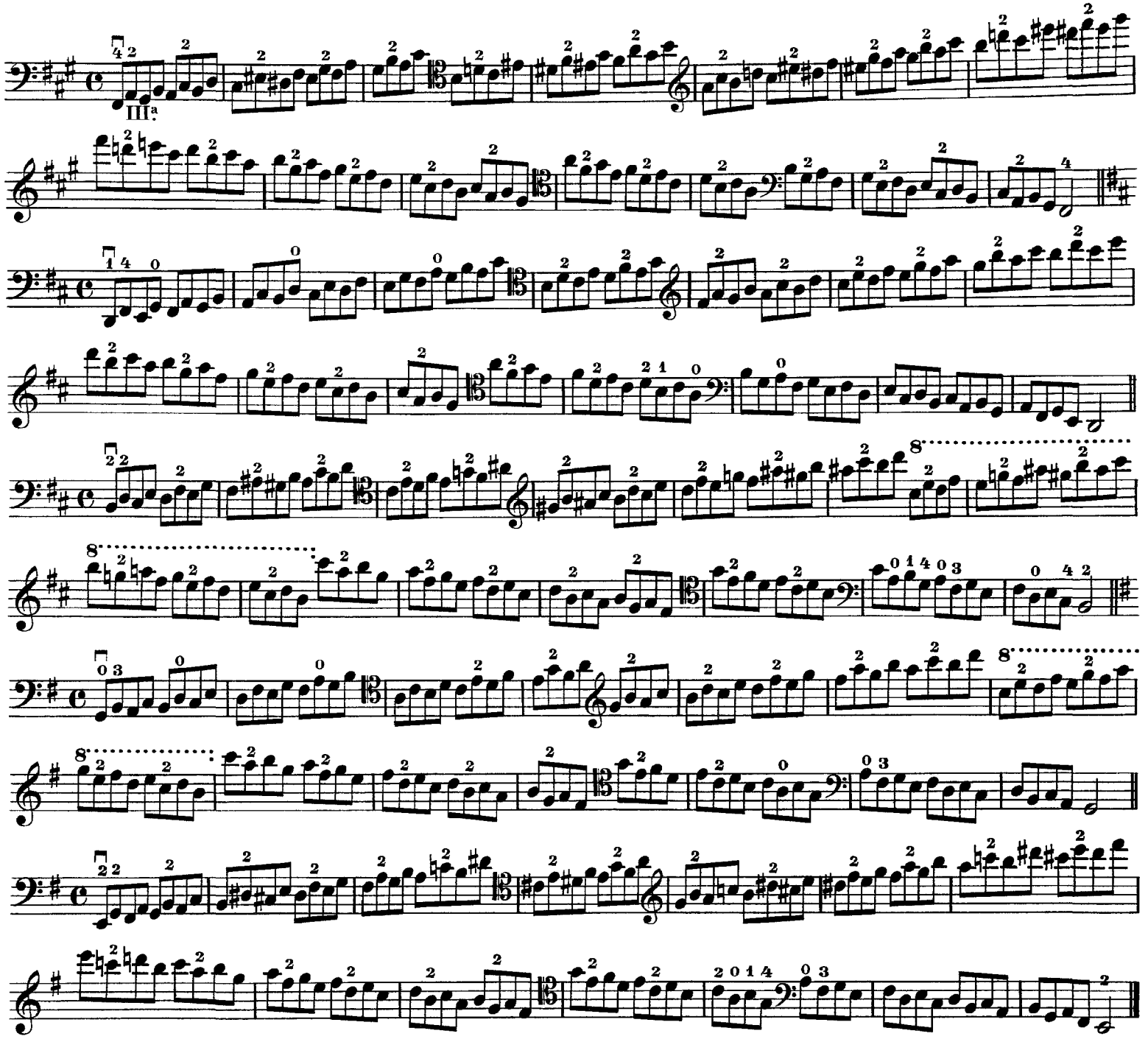
Gammes en tierces dans l'intervalle de quatre octaves

Scales in thirds of four octaves




I.ª
I.ª
III.ª
II.ª
I.ª
II.ª

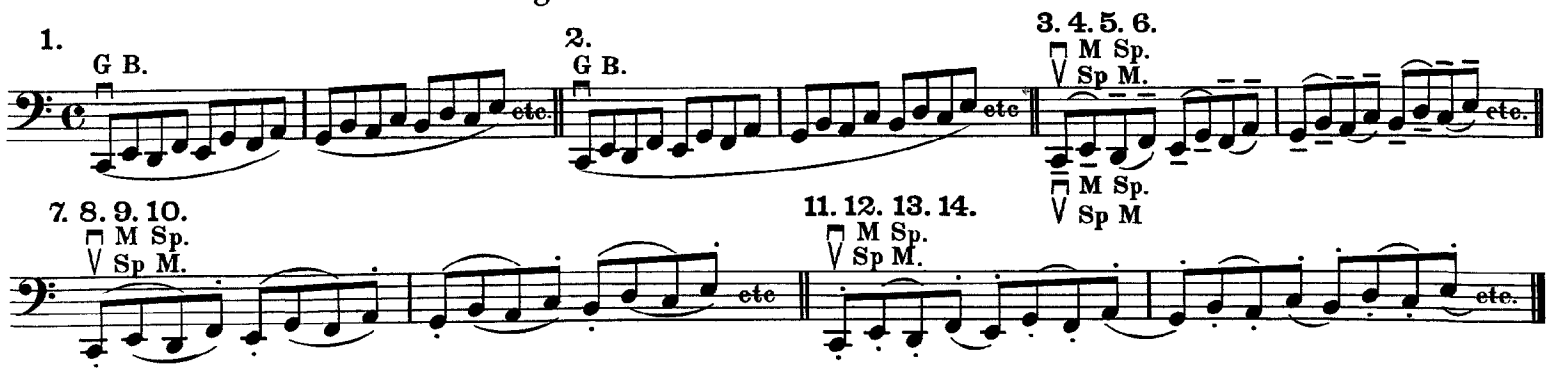

III.ª



Stricharten für die Terzentonleitern in vier Oktaven

Coups d'archets pour les gammes en tierces dans l'intervalle de quatre octaves

Bowings for scales in thirds of four octaves



Part 2

Übungen für den rechten Arm und das Handgelenk

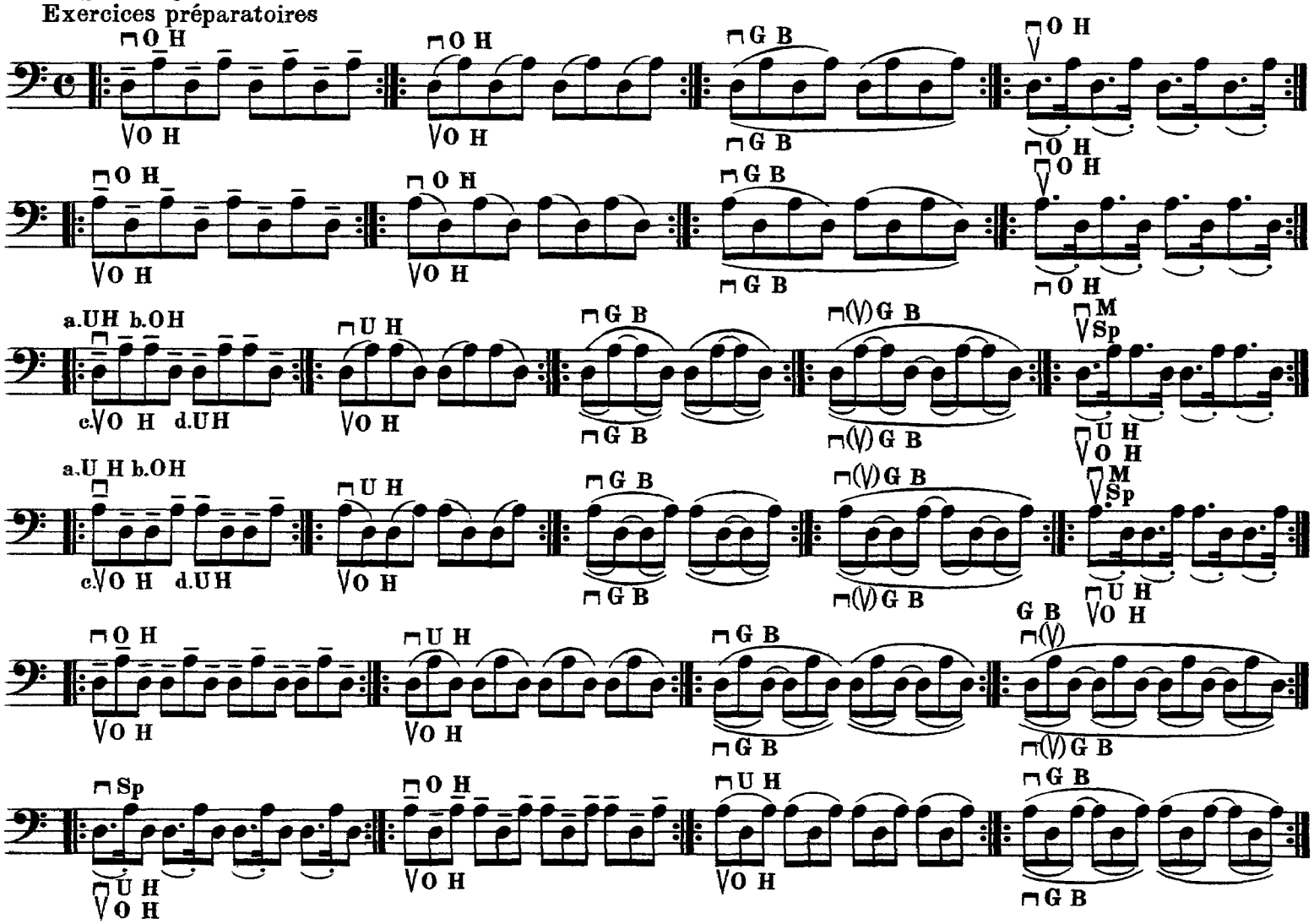
Exercises for the right arm and wrist Exercices pour le bras droit et le poignet

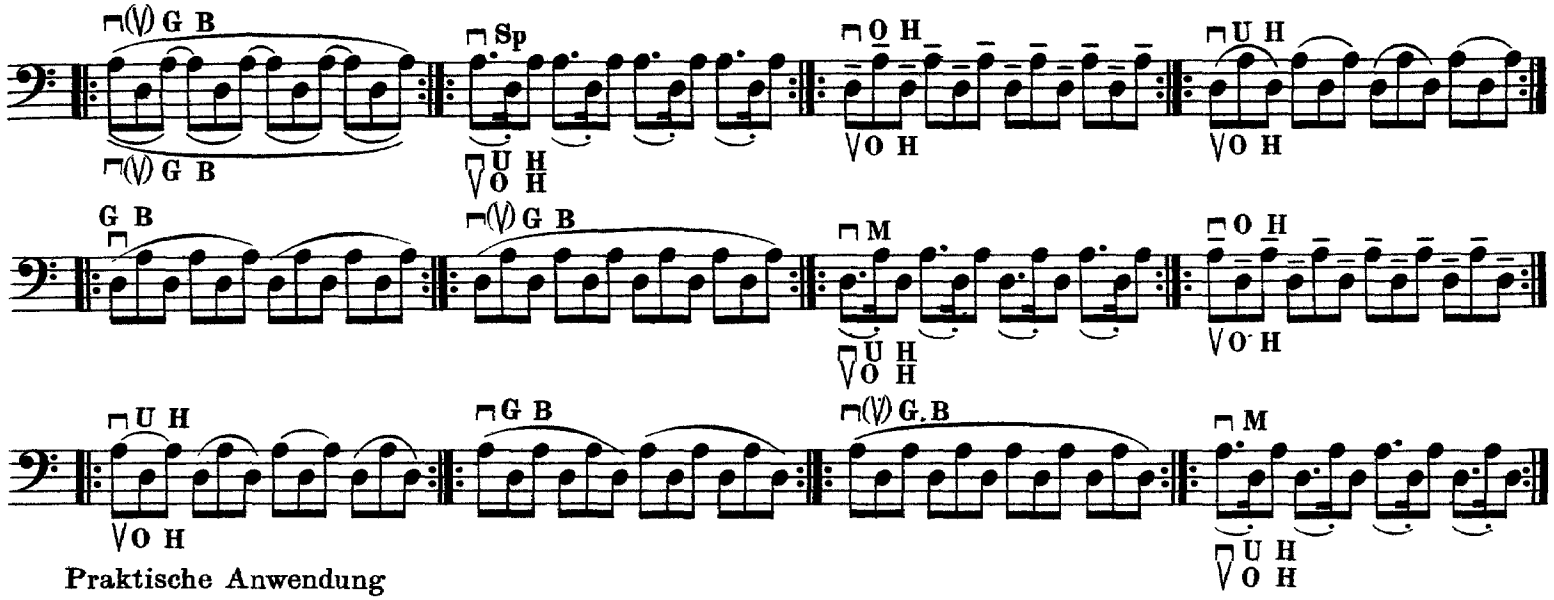
⊓ Abstrich. *Down-bow.* Tiré.
V Aufstrich. *Up-bow.* Poussé.
G B Ganze Bogenlänge, von der Spitze bis zum Frosch und umgekehrt.
With the whole of the bow, from the point to the nut and vice versa.
De toute la longueur de l'archet, de la pointe au talon et vice versa.
O H Obere Hälfte des Bogens von der Spitze bis zur Mitte und umgekehrt.
Upper half of the bow, from the point to the middle and vice versa.
Moitié supérieure de l'archet, de la pointe au milieu et vice versa.
U H Untere Hälfte des Bogens von der Mitte bis zum Frosch und umgekehrt.
Lower half of the bow, from the middle to the nut and vice versa.
Moitié inférieure de l'archet, du milieu au talon et vice versa.
Sp. An der Spitze des Bogens. *At the point of the bow.* A la pointe de l'archet.
M. In der Mitte. *In the middle of the bow.* Au milieu de l'archet.
Fr. Am Frosch. *At the nut of the bow.* Au talon.

Übungen auf 2 Saiten

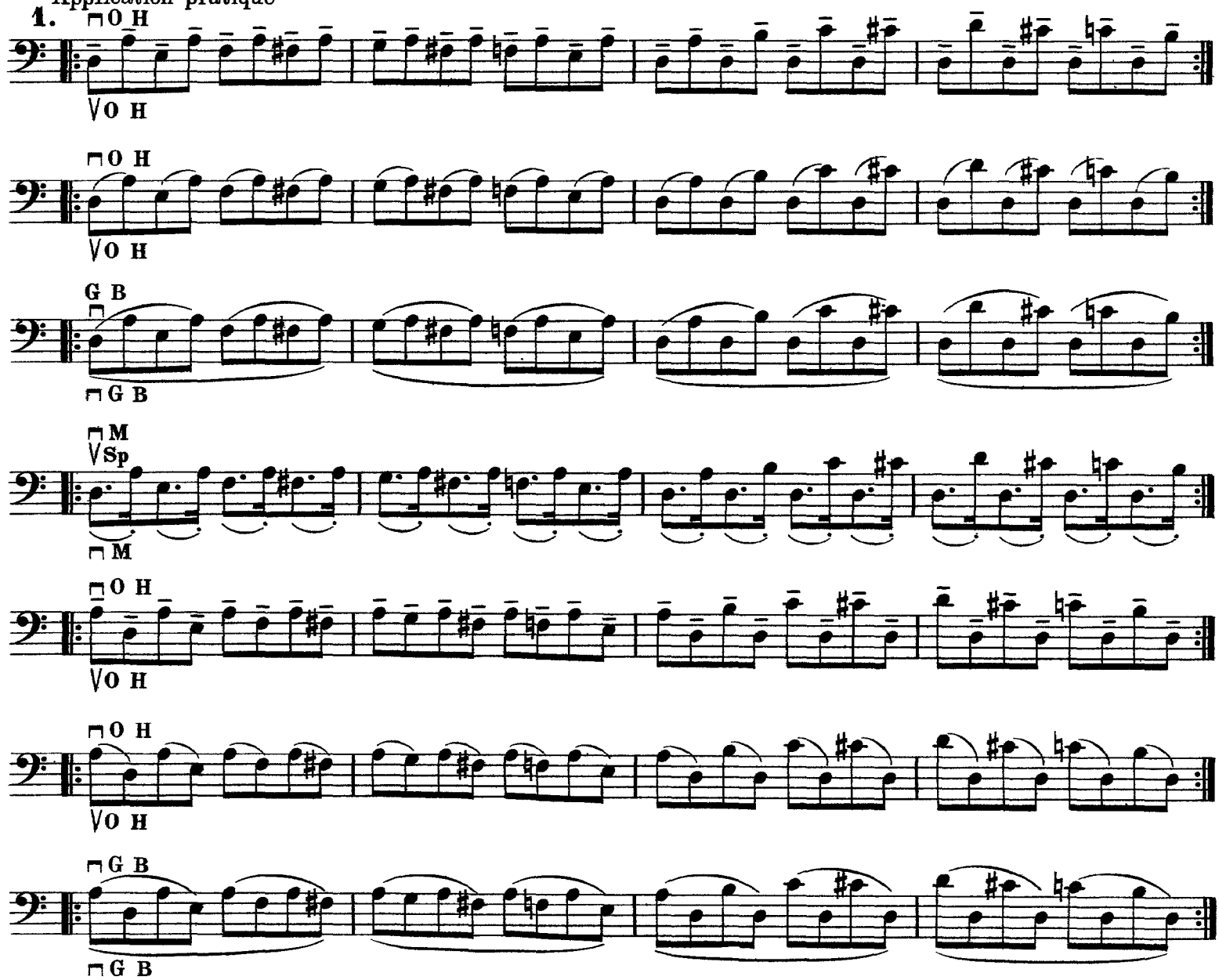
Exercises on 2 Strings Exercices sur 2 cordes

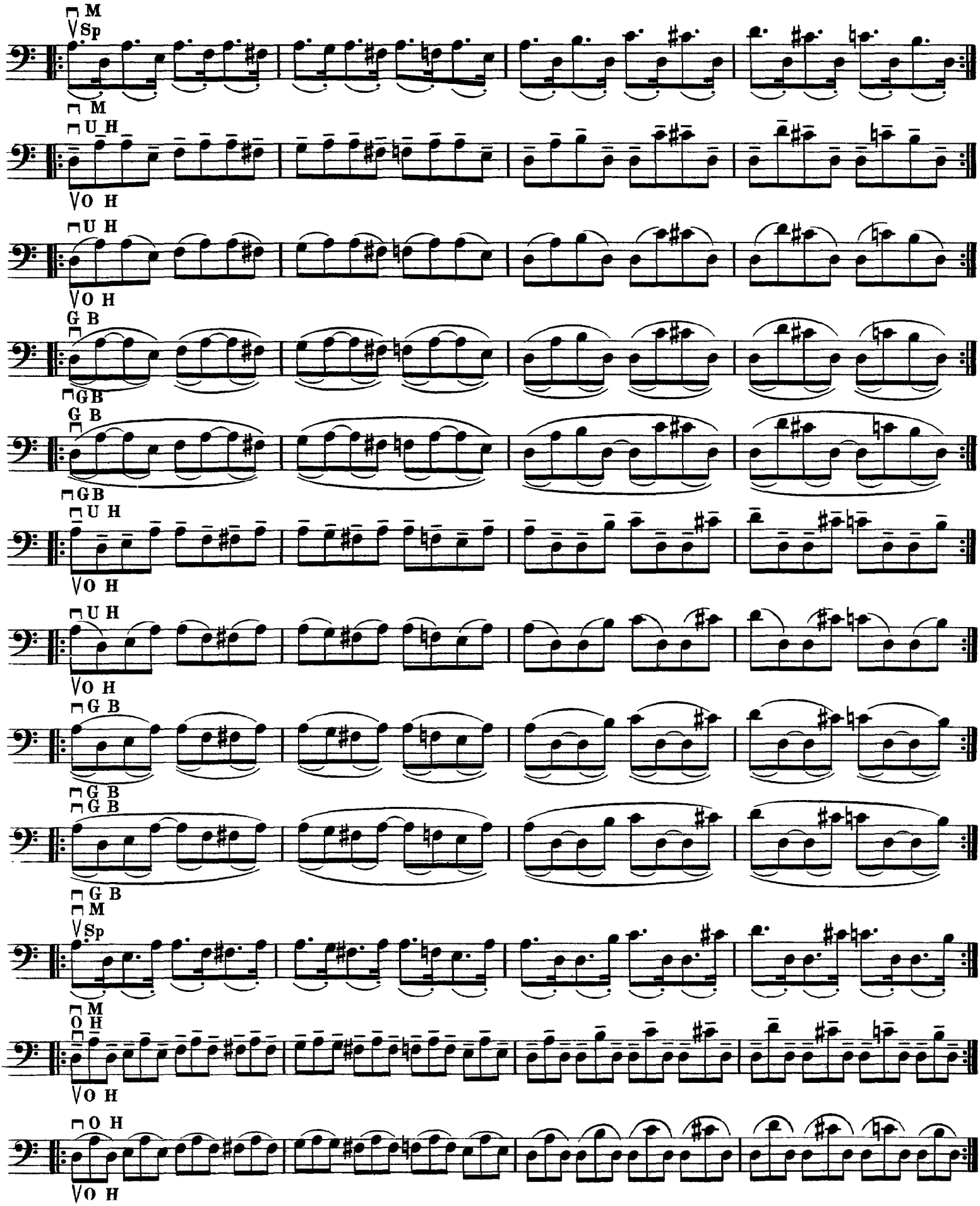
Vorübungen
Preparatory Exercises
Exercices préparatoires

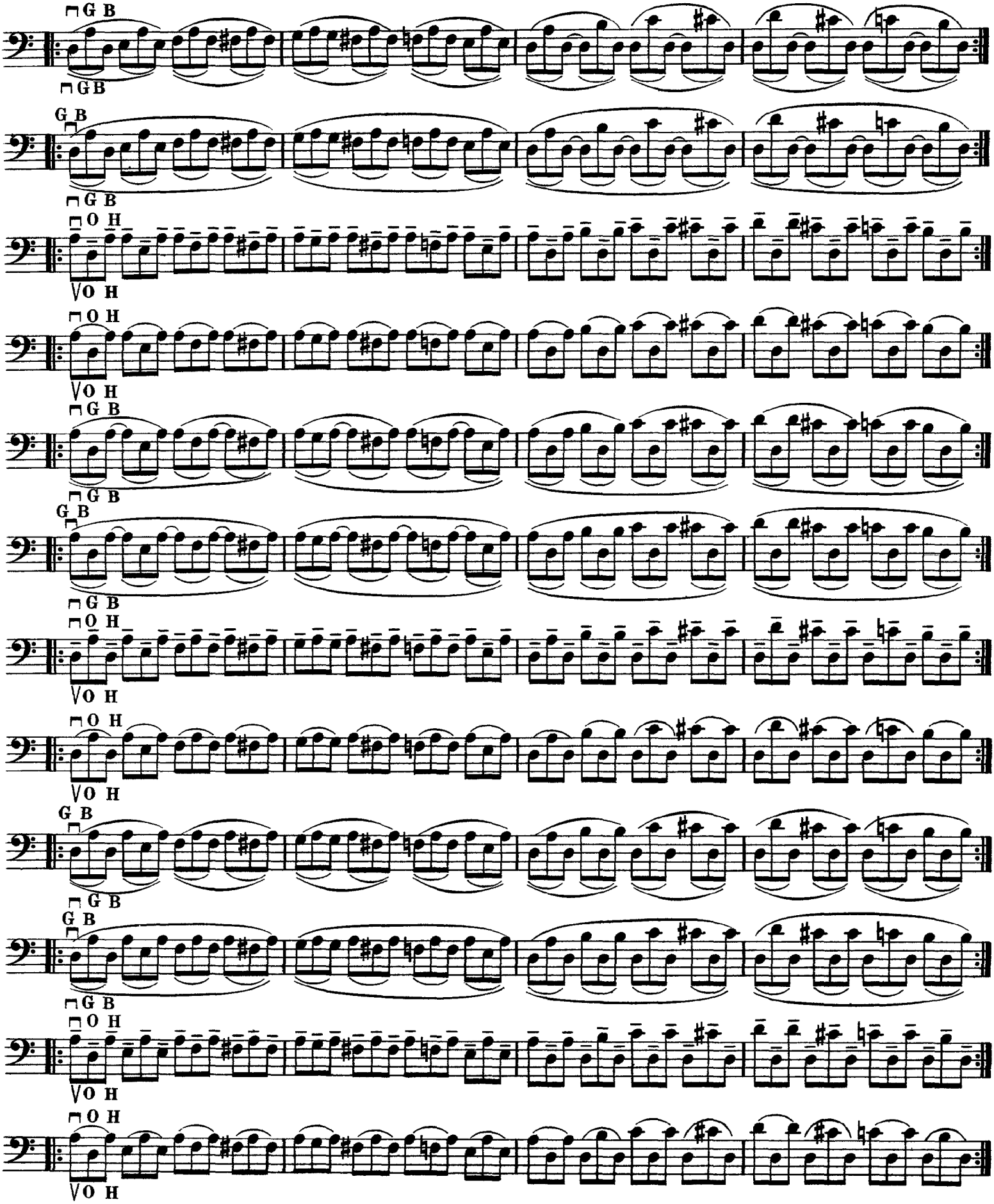


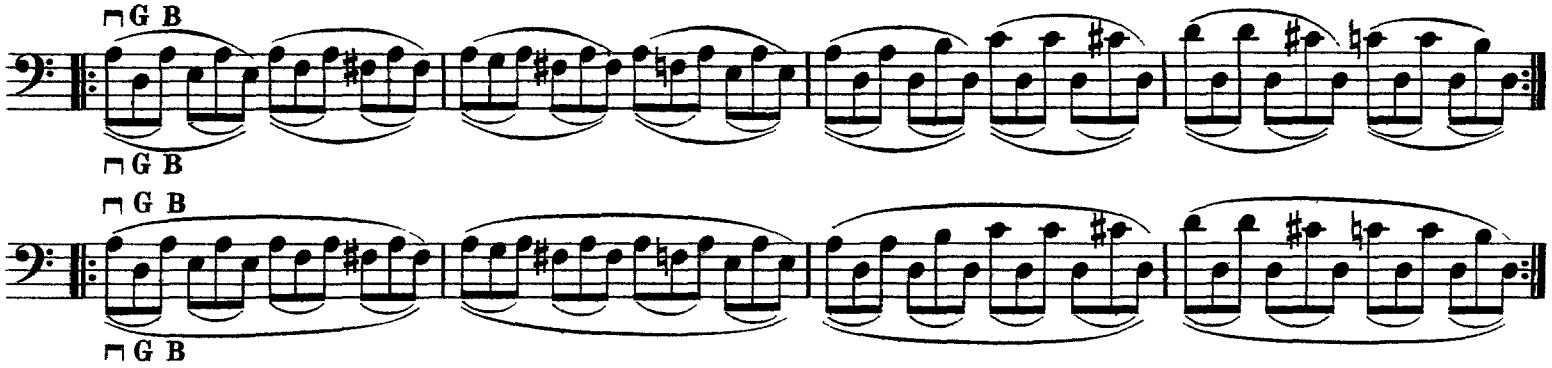


Praktische Anwendung
Practical Application
Application pratique

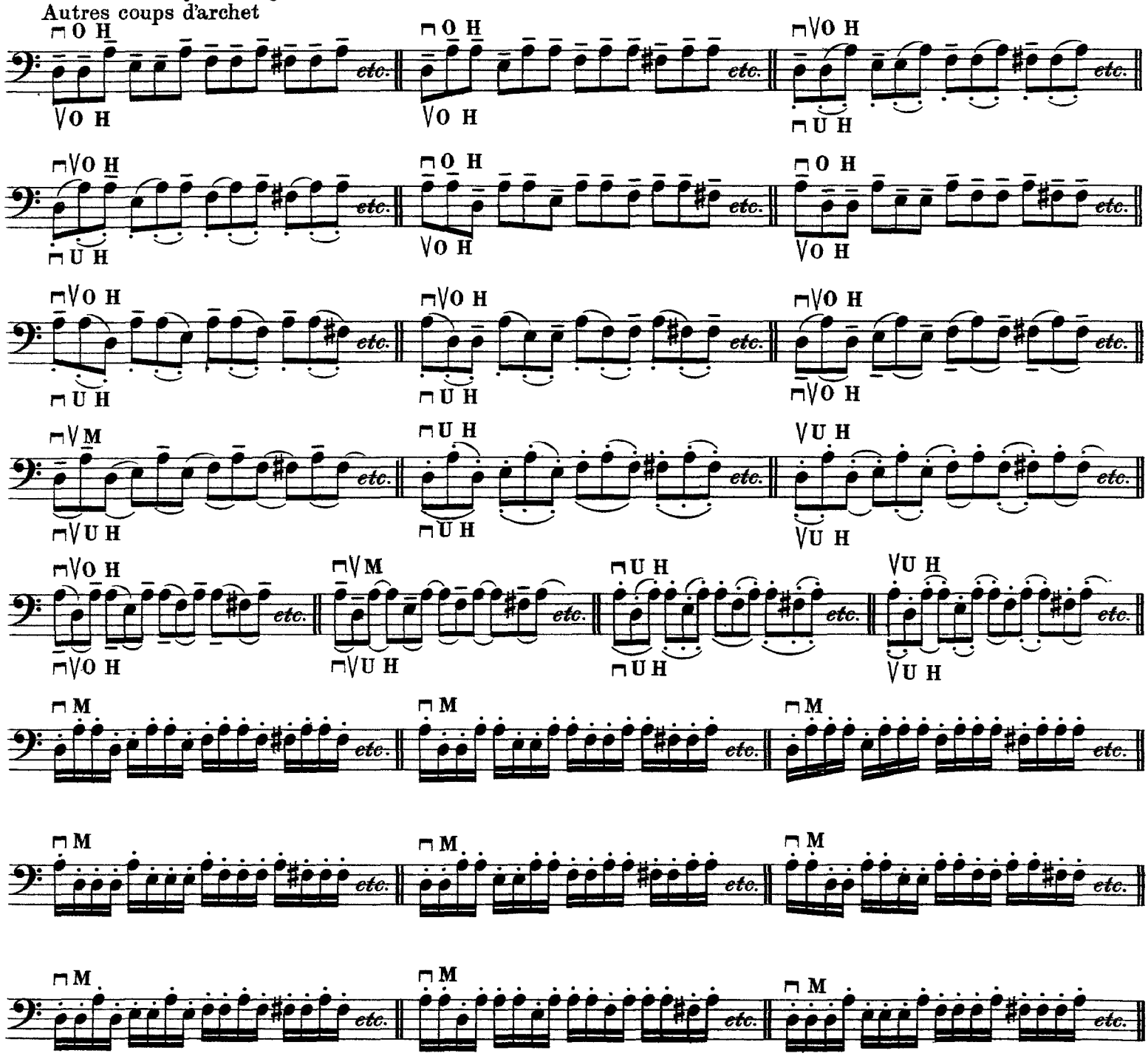


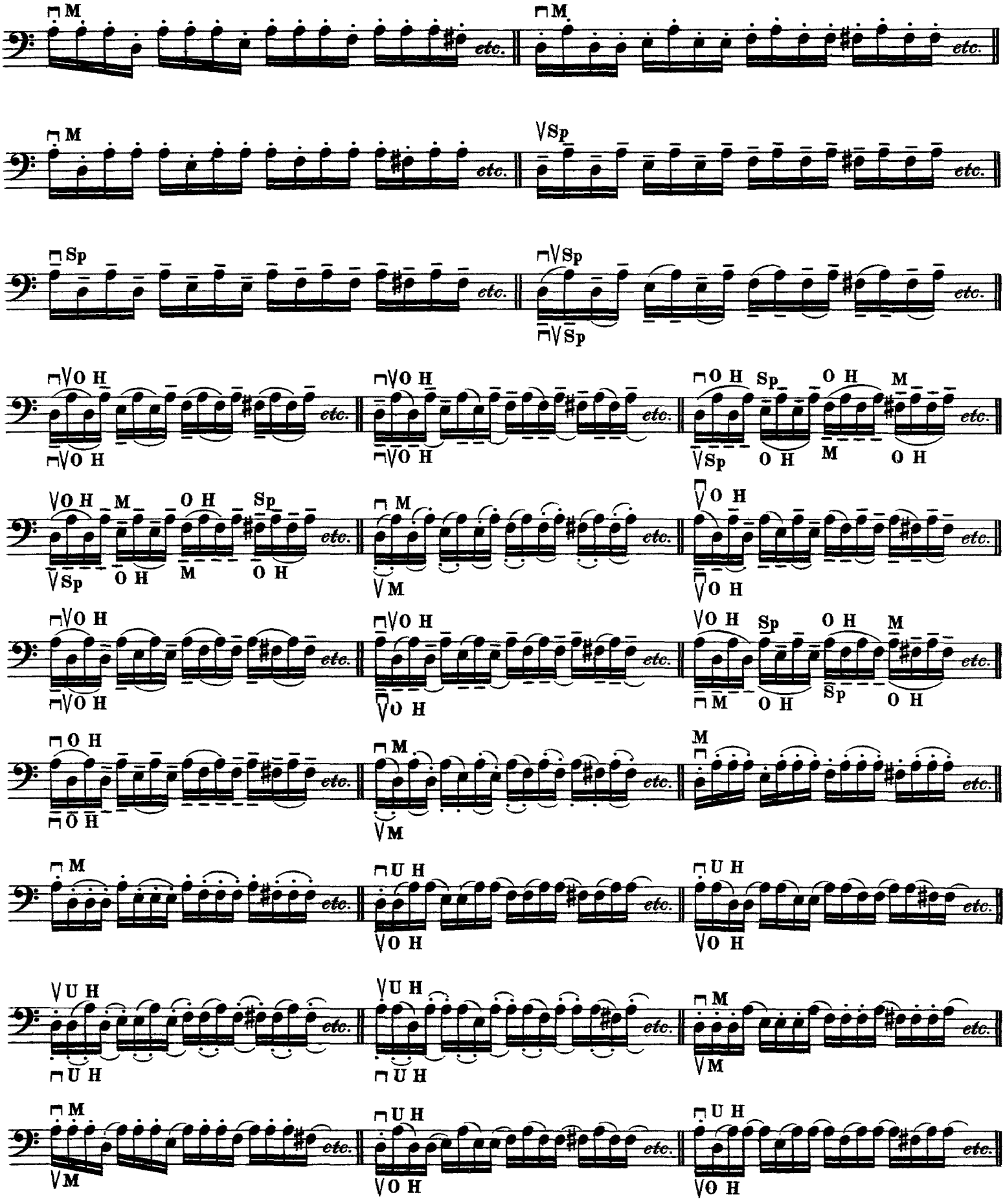

M
Sp
M
U H
O H
U H
O H
G B
G B
G B
G B
U H
O H
U H
O H
G B
G B
G B
M
Sp
M
O H
O H
O H
O H


G B
O H

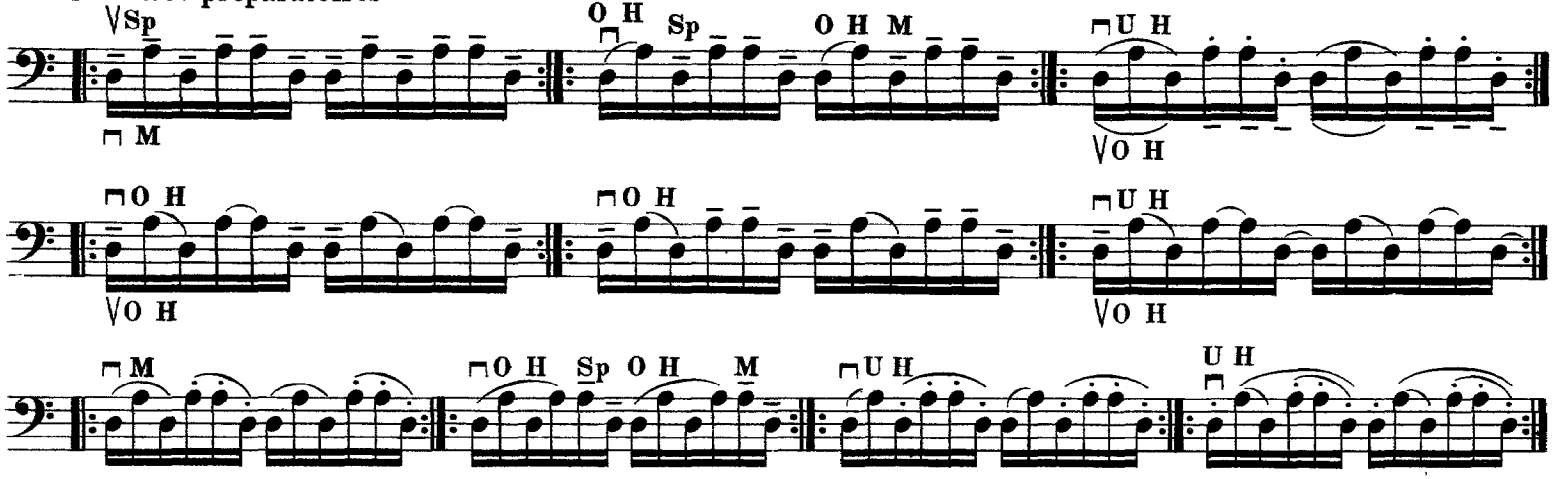


Weitere Stricharten
Other Kinds of Bowing
Autres coups d'archet

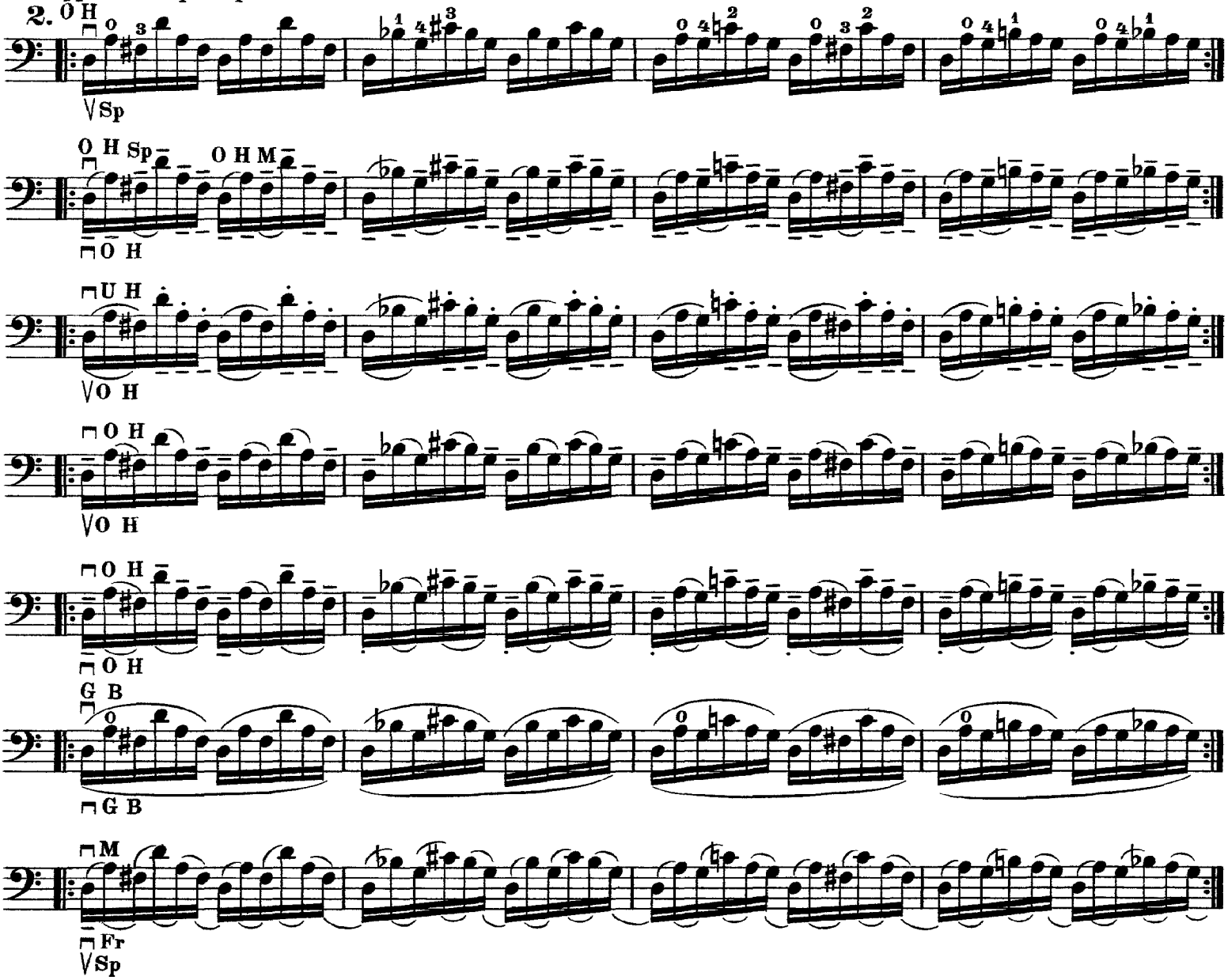


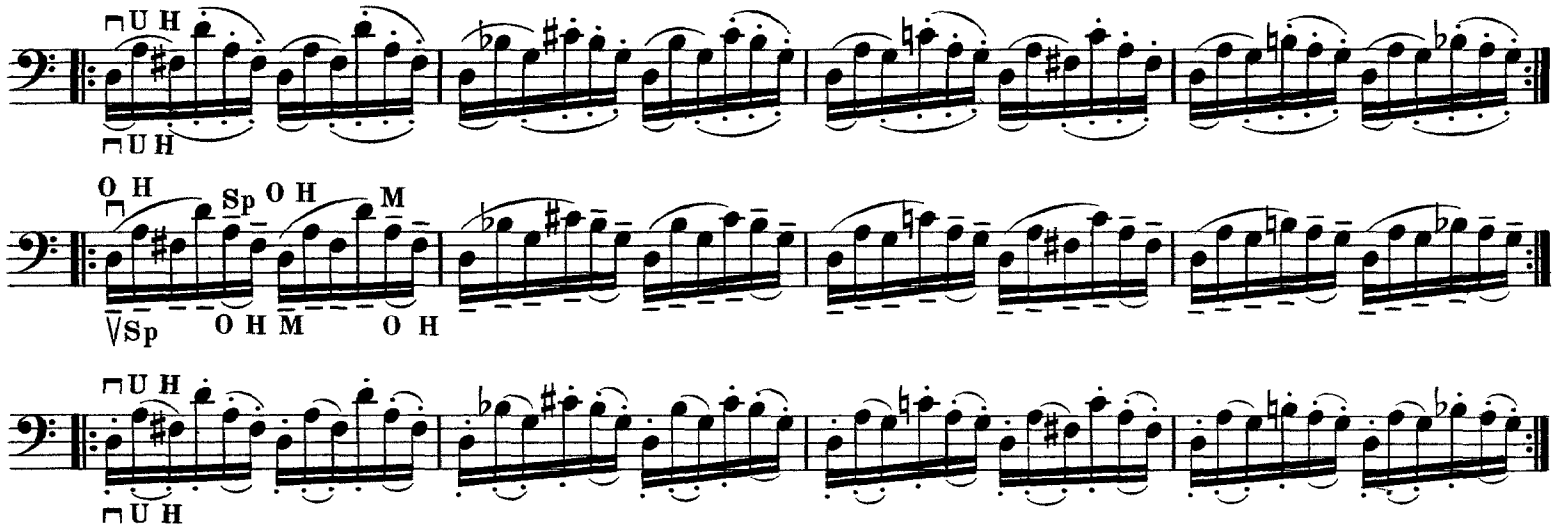

M
Sp
O H
U H
etc.

Vorübungen
Preparatory Exercises
Exercices préparatoires

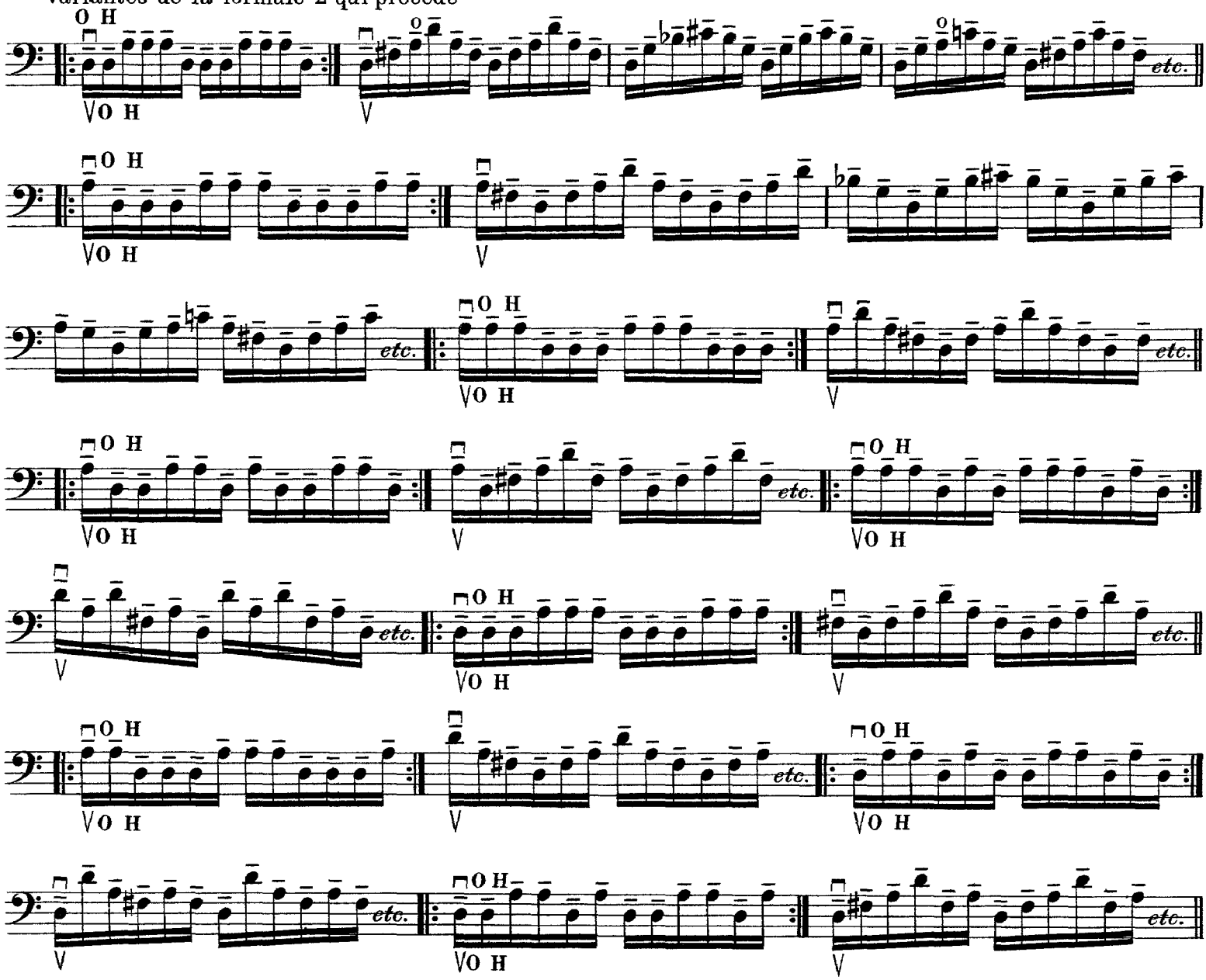


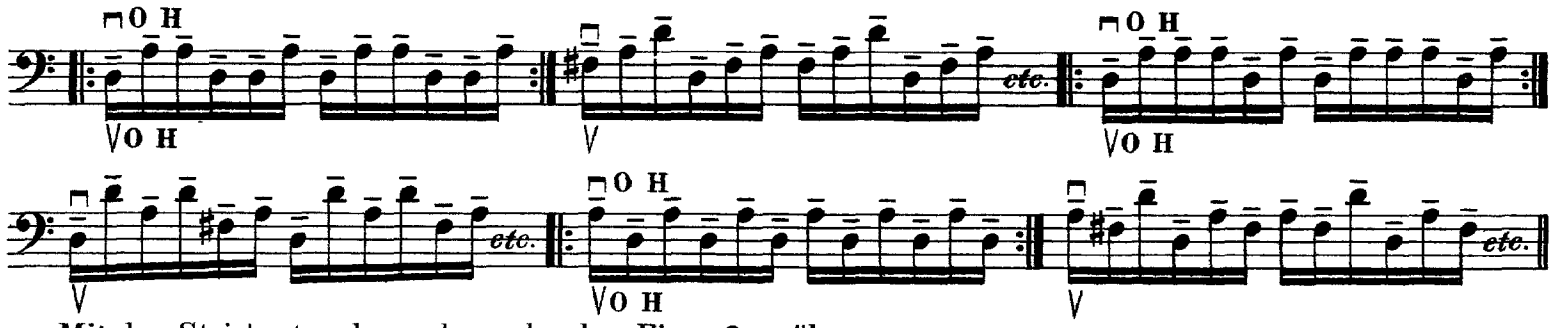
Praktische Anwendung
Practical Application
Application pratique





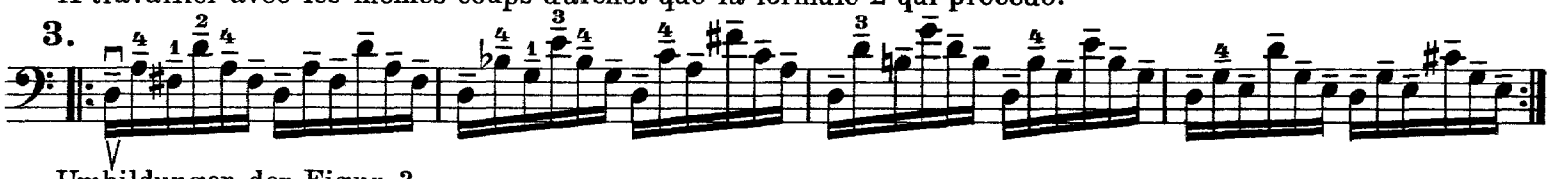
Umbildungen der vorher gehenden Figur 2
Variations of the preceding Figure 2
Variantes de la formule 2 qui précède



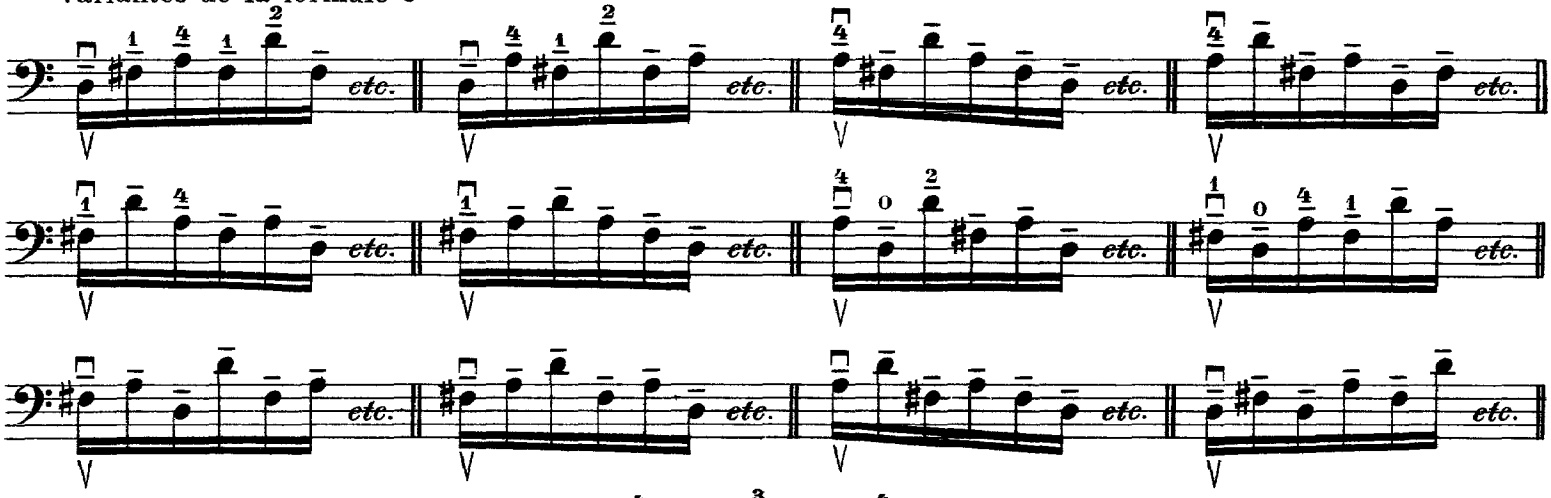


Mit den Stricharten der vorher gehenden Figur 2 zu üben.
Practise with the bowings of the preceding Figure 2.
A travailler avec les mêmes coups d'archet que la formule 2 qui précède.

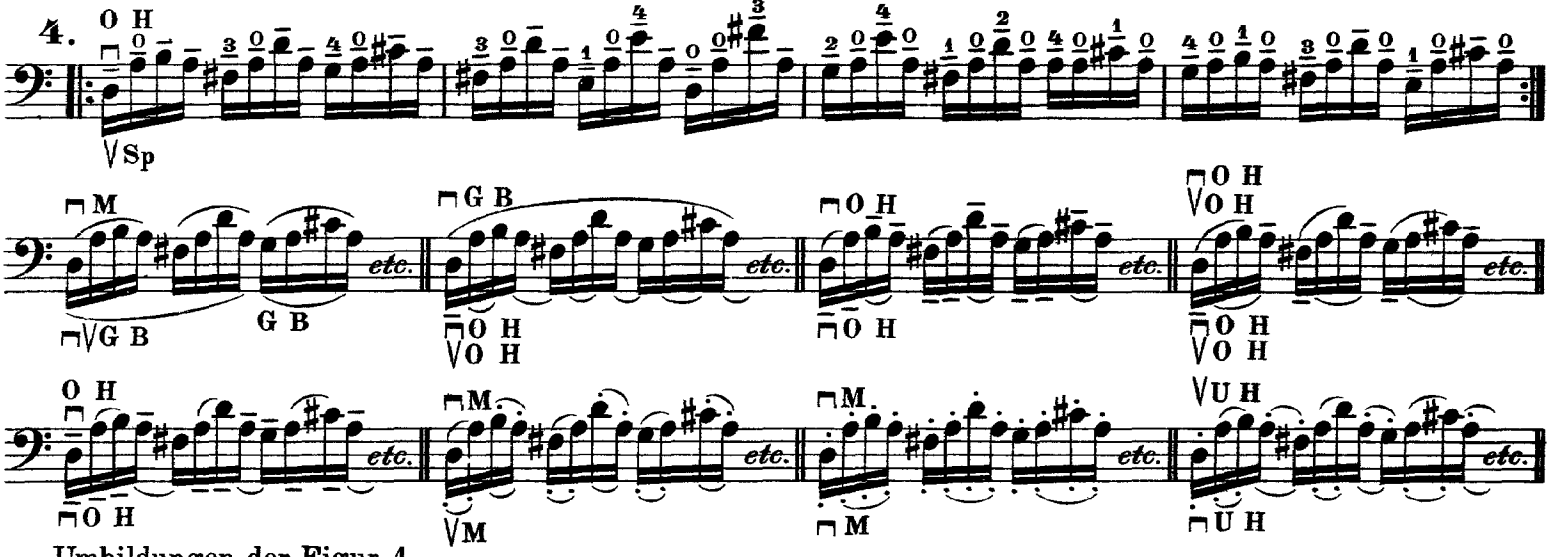
3.



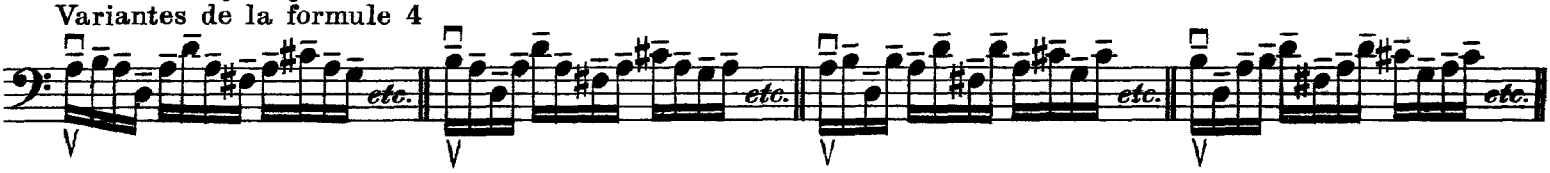
Umbildungen der Figur 3
Variations of Figure 3
Variantes de la formule 3

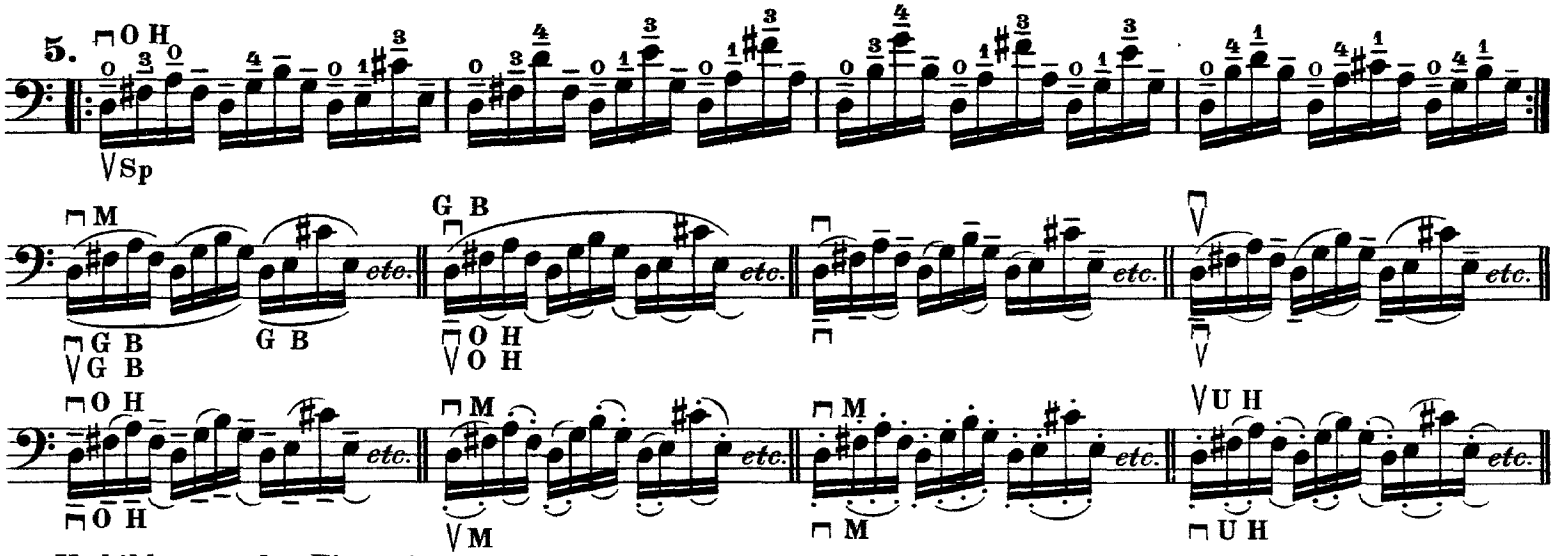


4.

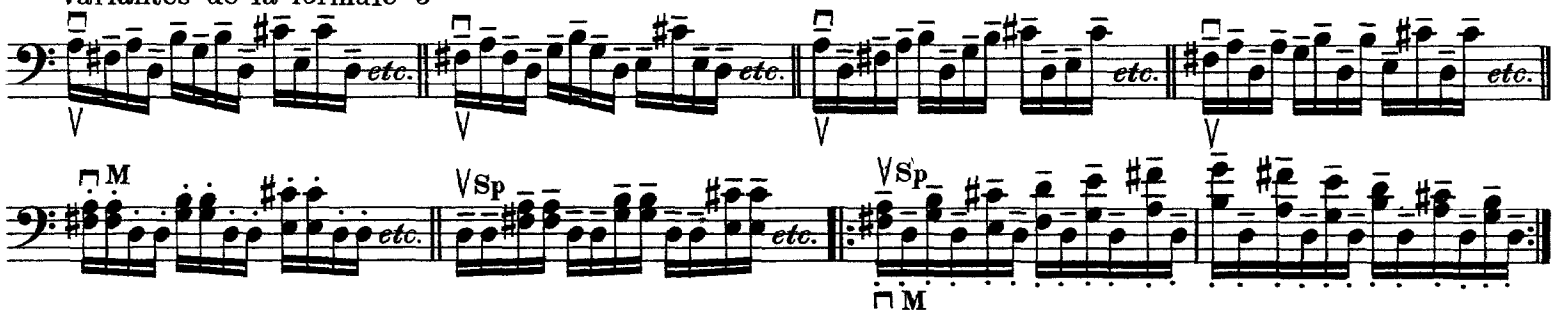


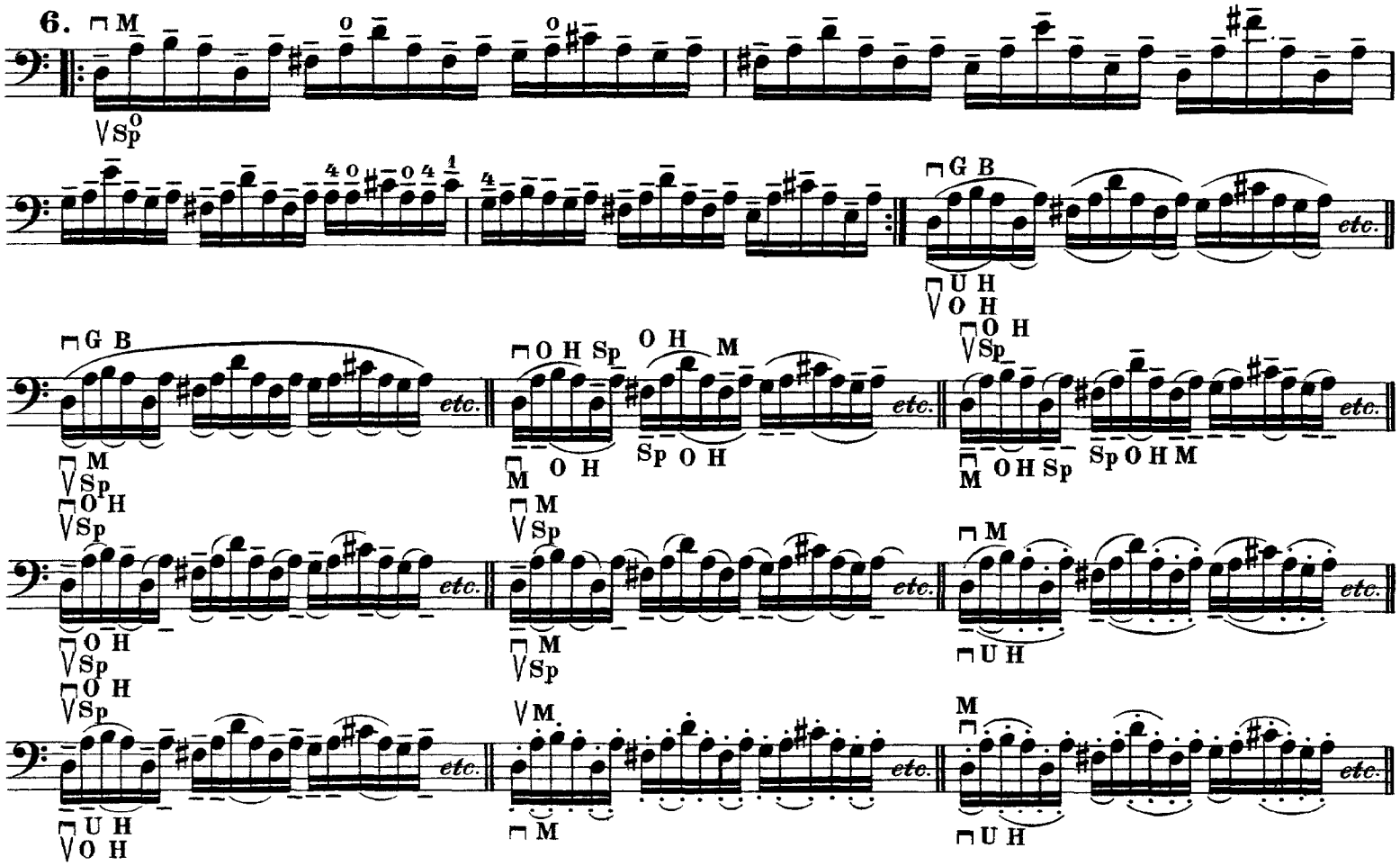
Umbildungen der Figur 4
Variations of Figure 4
Variantes de la formule 4

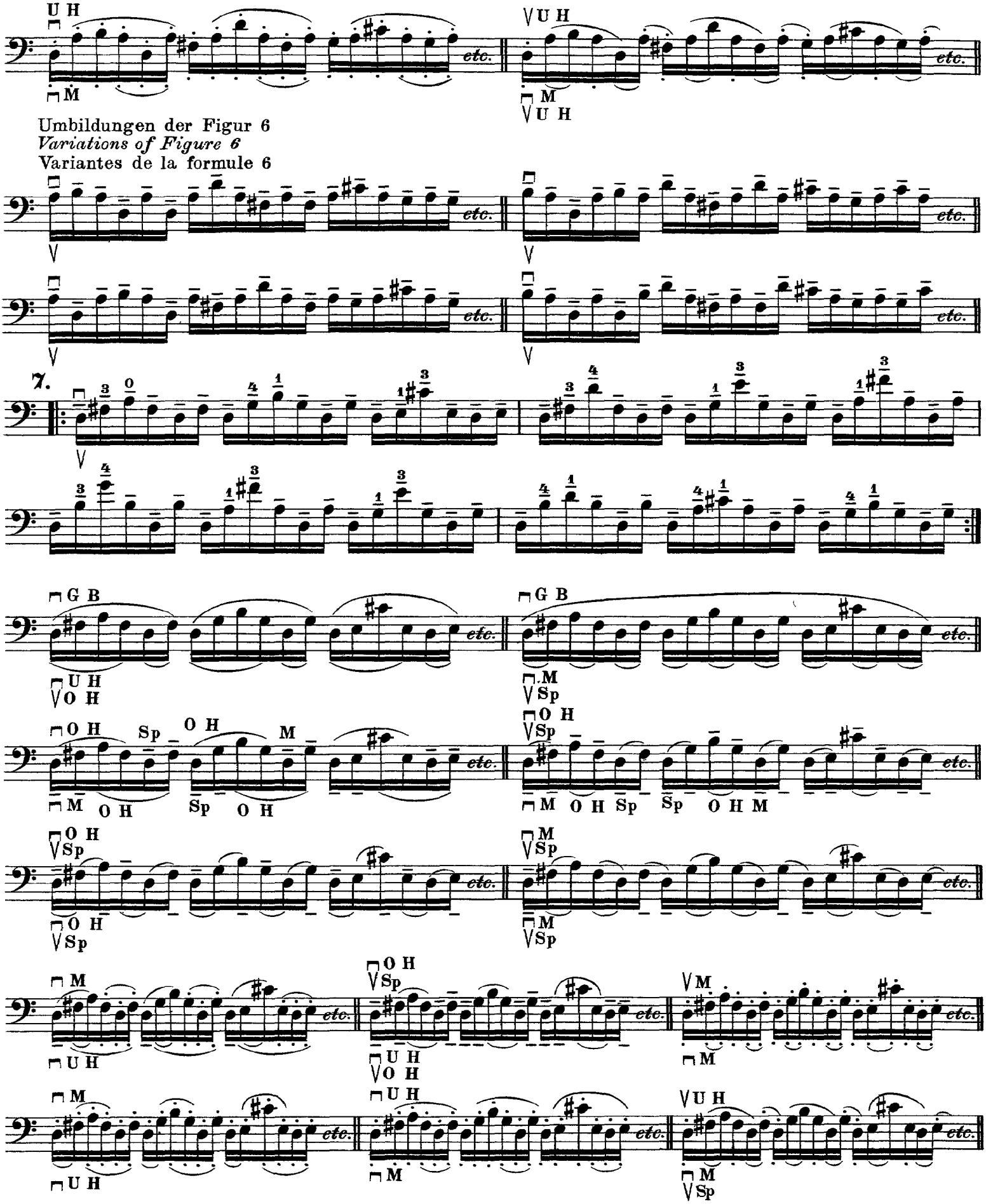




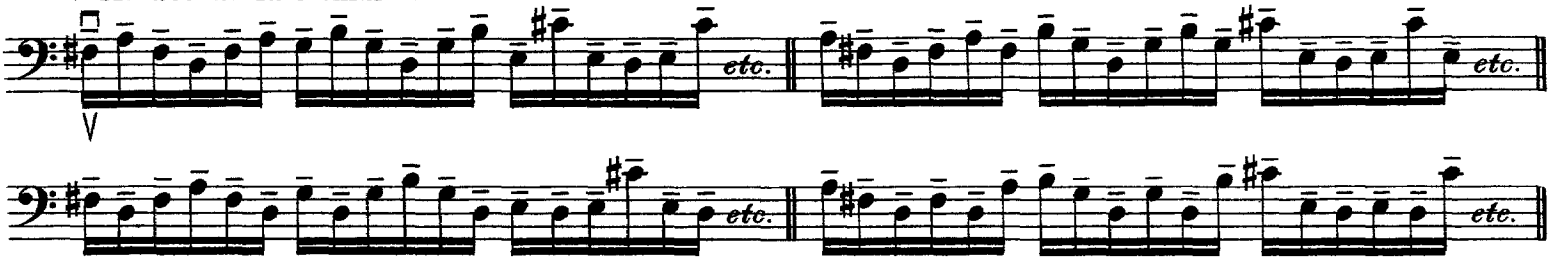
Umbildungen der Figur 5
Variations of Figure 5
Variantes de la formule 5

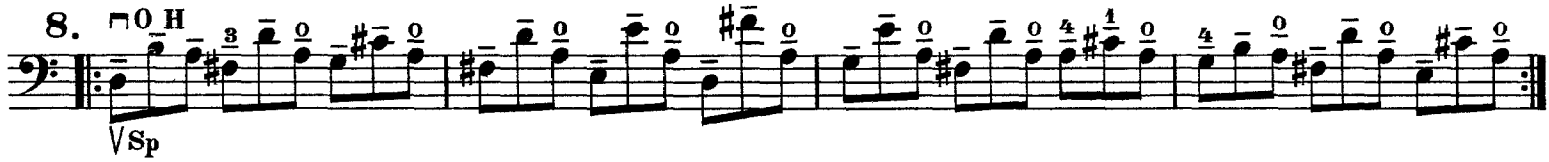


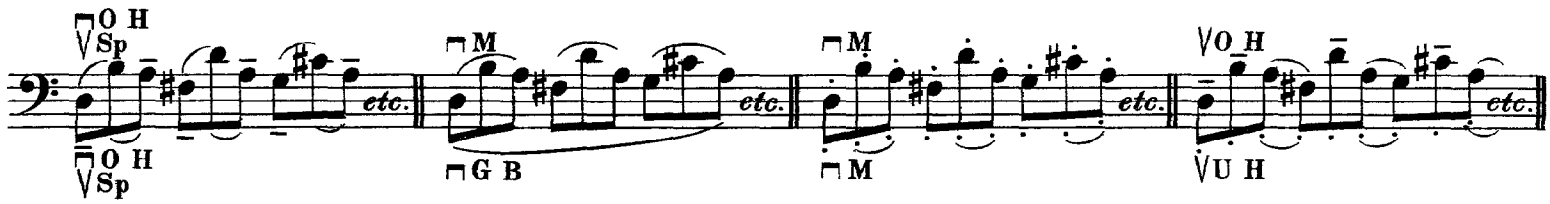



U H
M
etc.
U H
M
U H
Umbildungen der Figur 6
Variations of Figure 6
Variantes de la formule 6
7.
G B
U H
O H
M
Sp
O H
Sp
M
O H

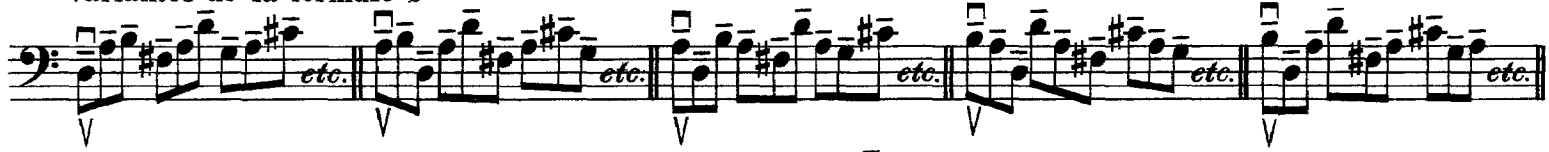
Umbildungen der Figur 7
Variations of Figure 7
Variantes de la formule 7

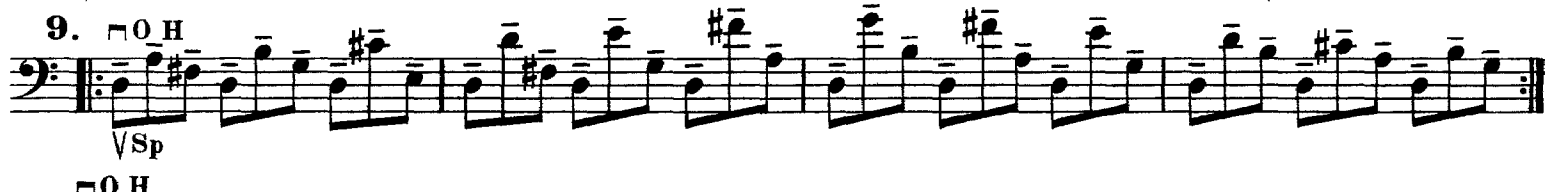


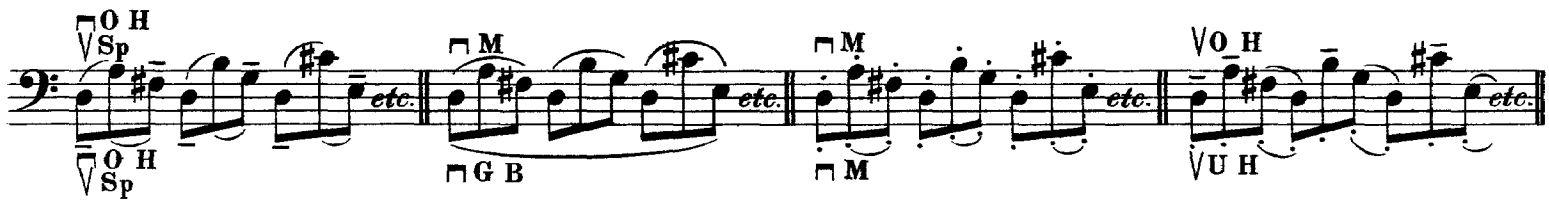




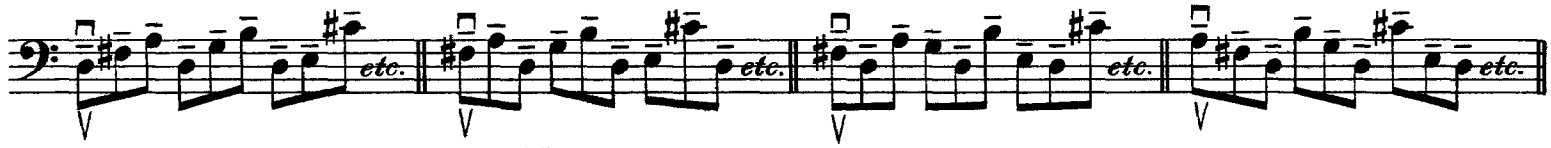
Umbildungen der Figur 8
Variations of Figure 8
Variantes de la formule 8

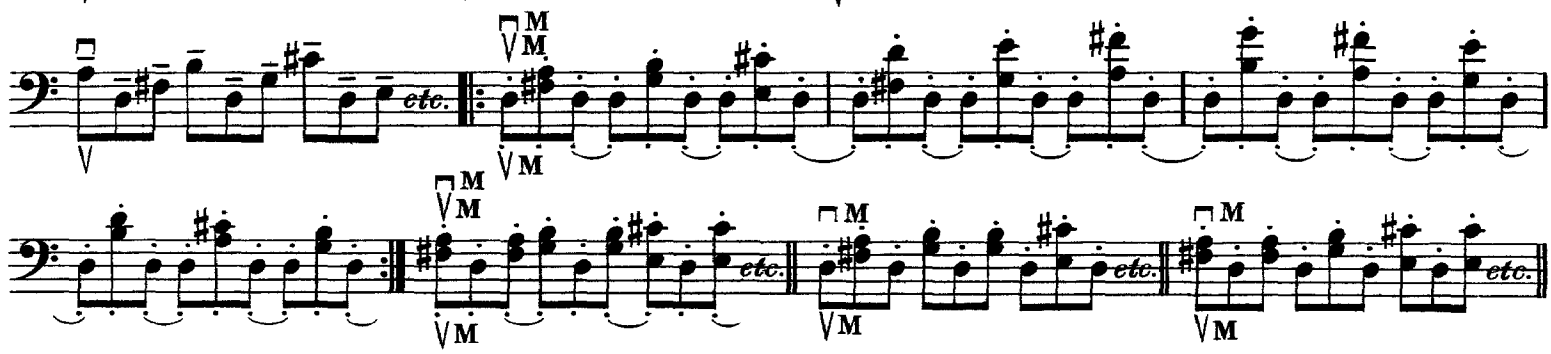






Umbildungen der Figur 9
Variations of Figure 9
Variantes de la formule 9



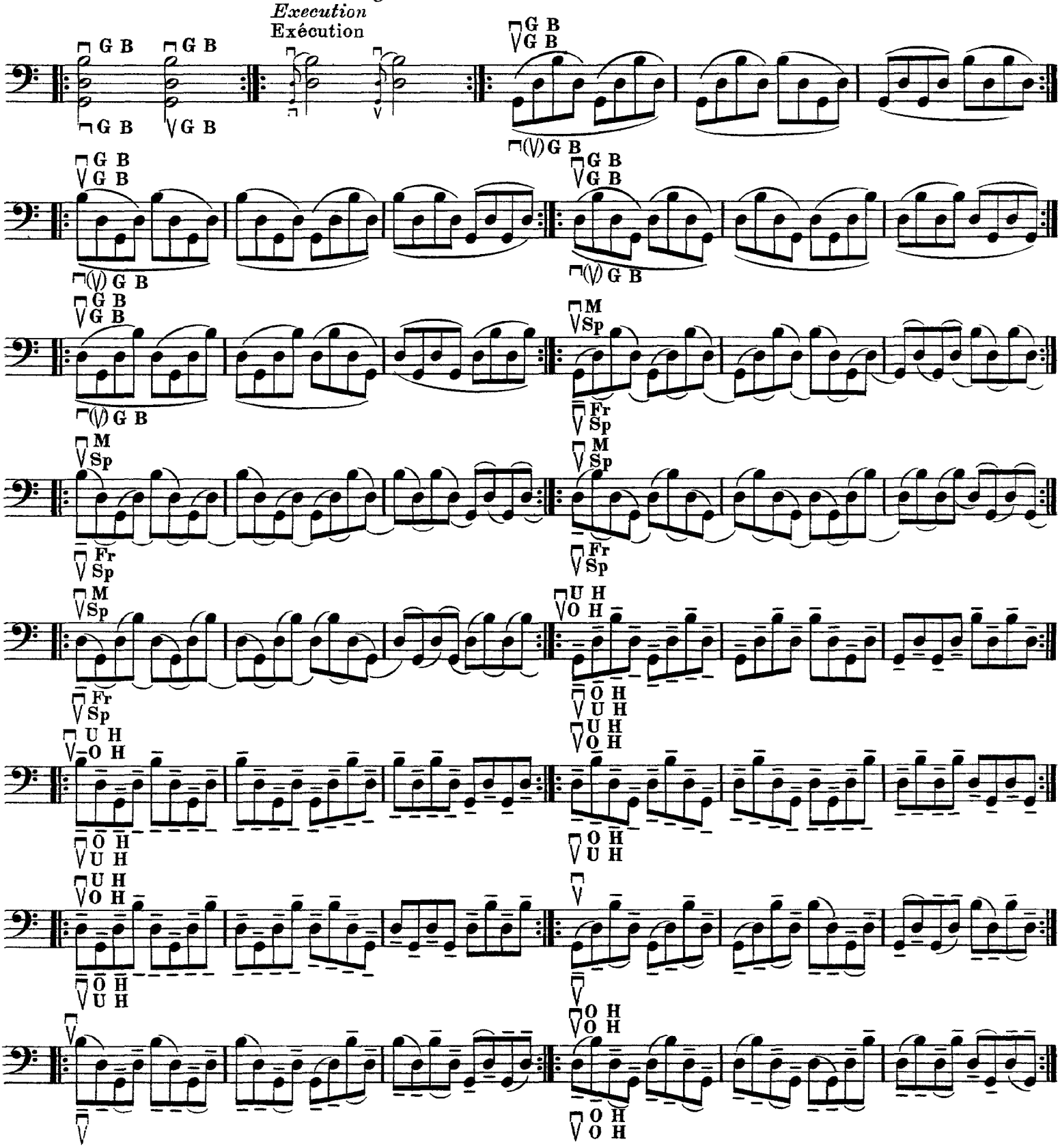


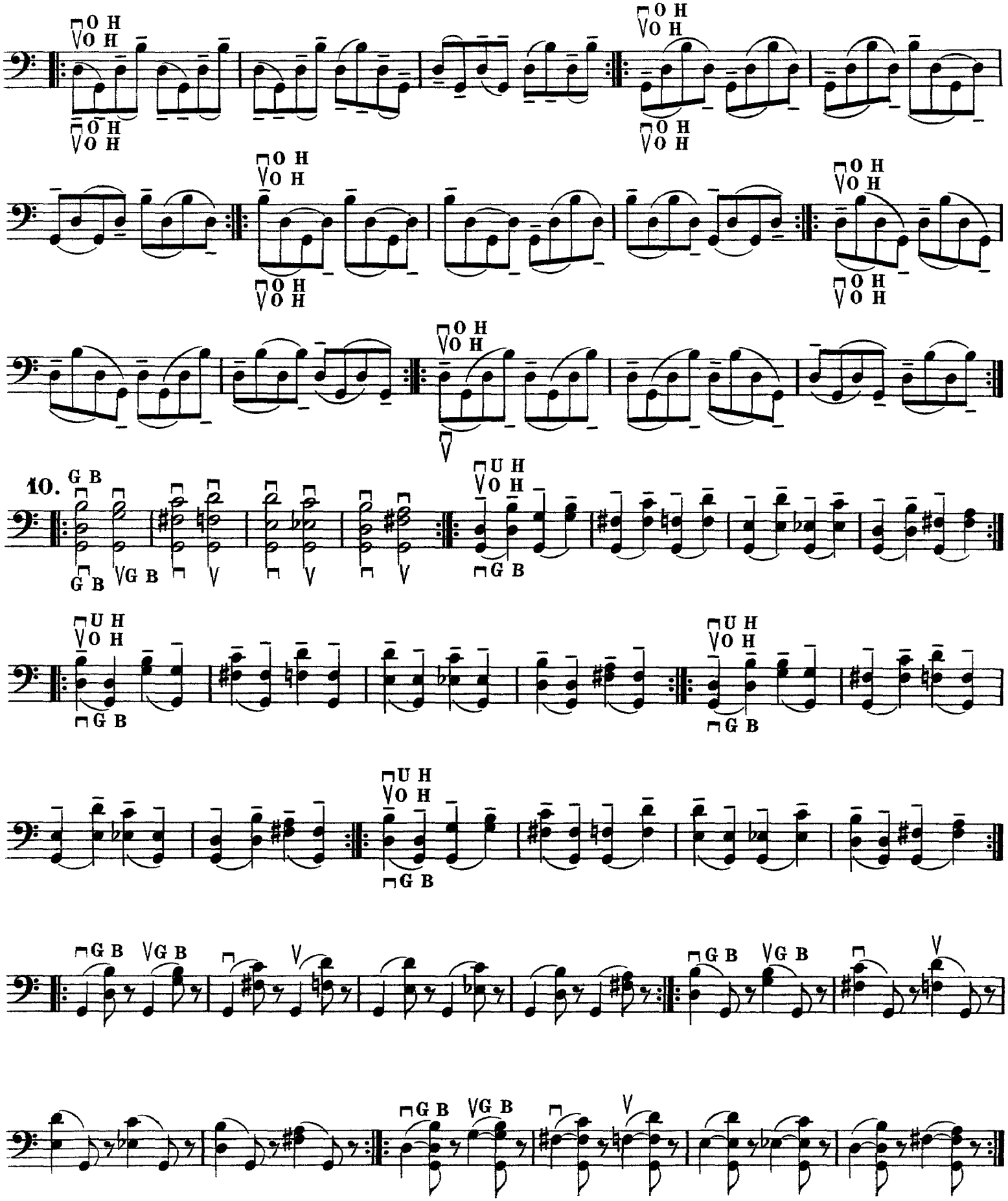
Übungen auf 3 Saiten

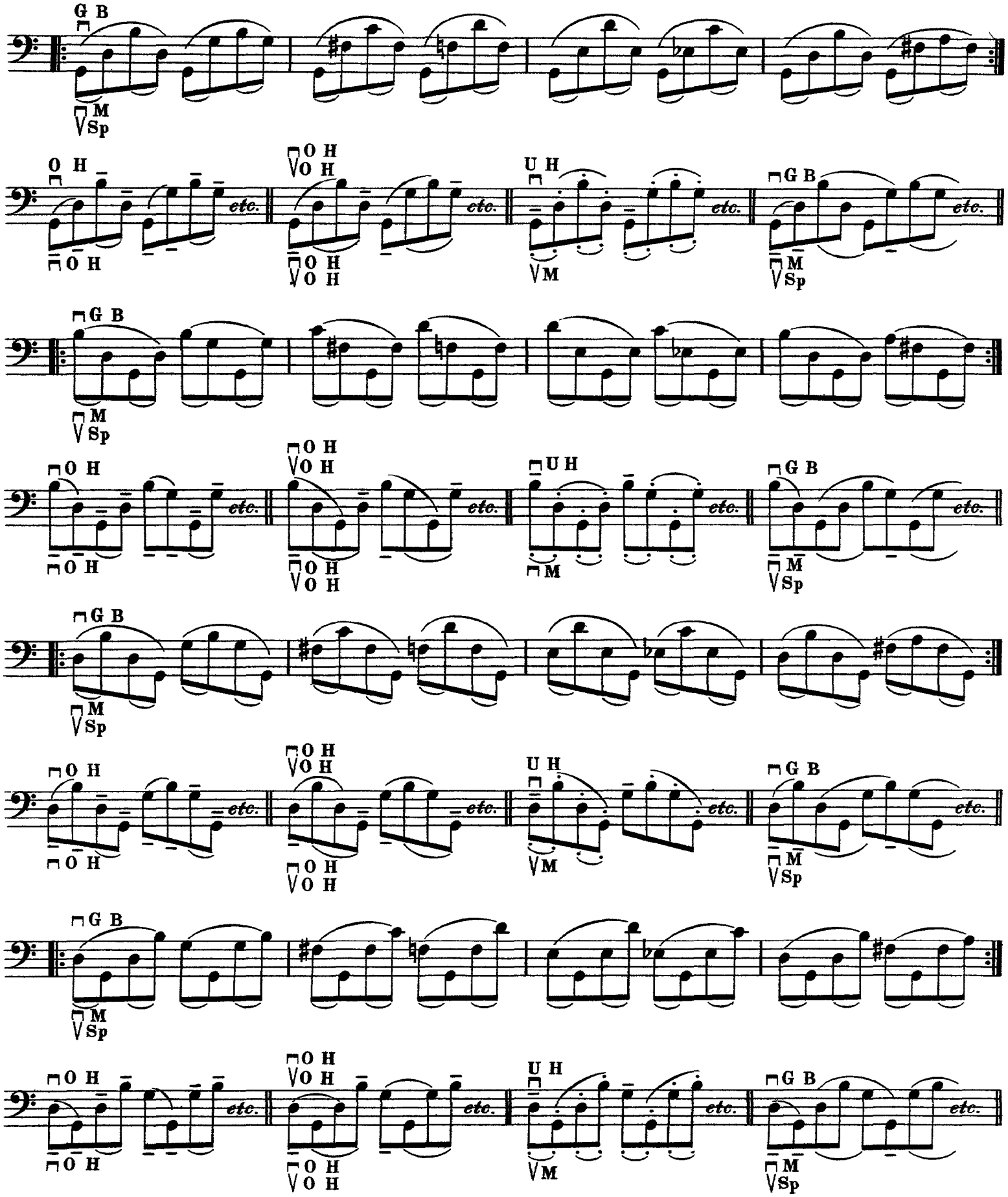
Exercises on 3 Strings Exercices sur 3 cordes

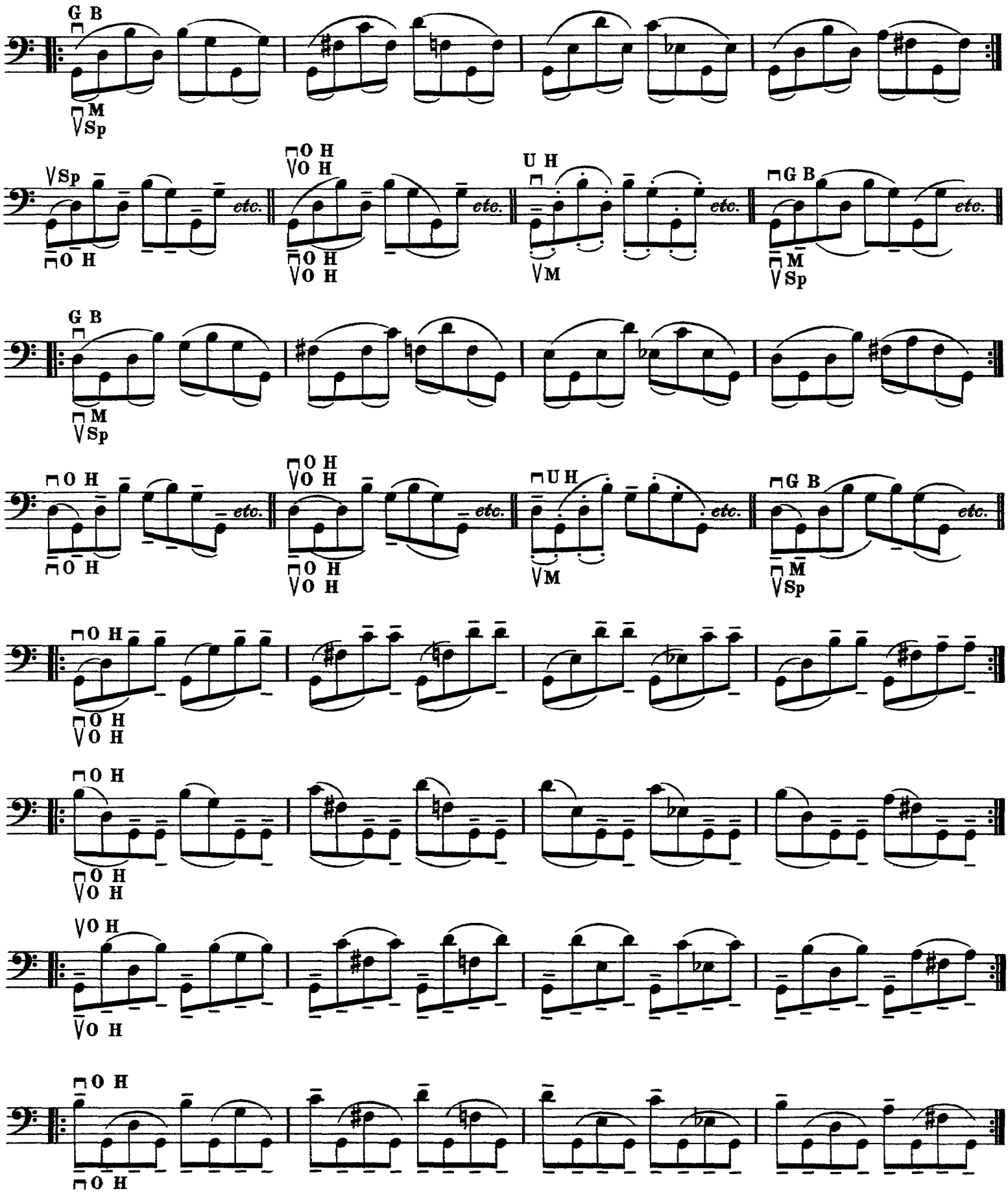
Vorübungen *Preparatory Exercises.* Exercices préparatoires

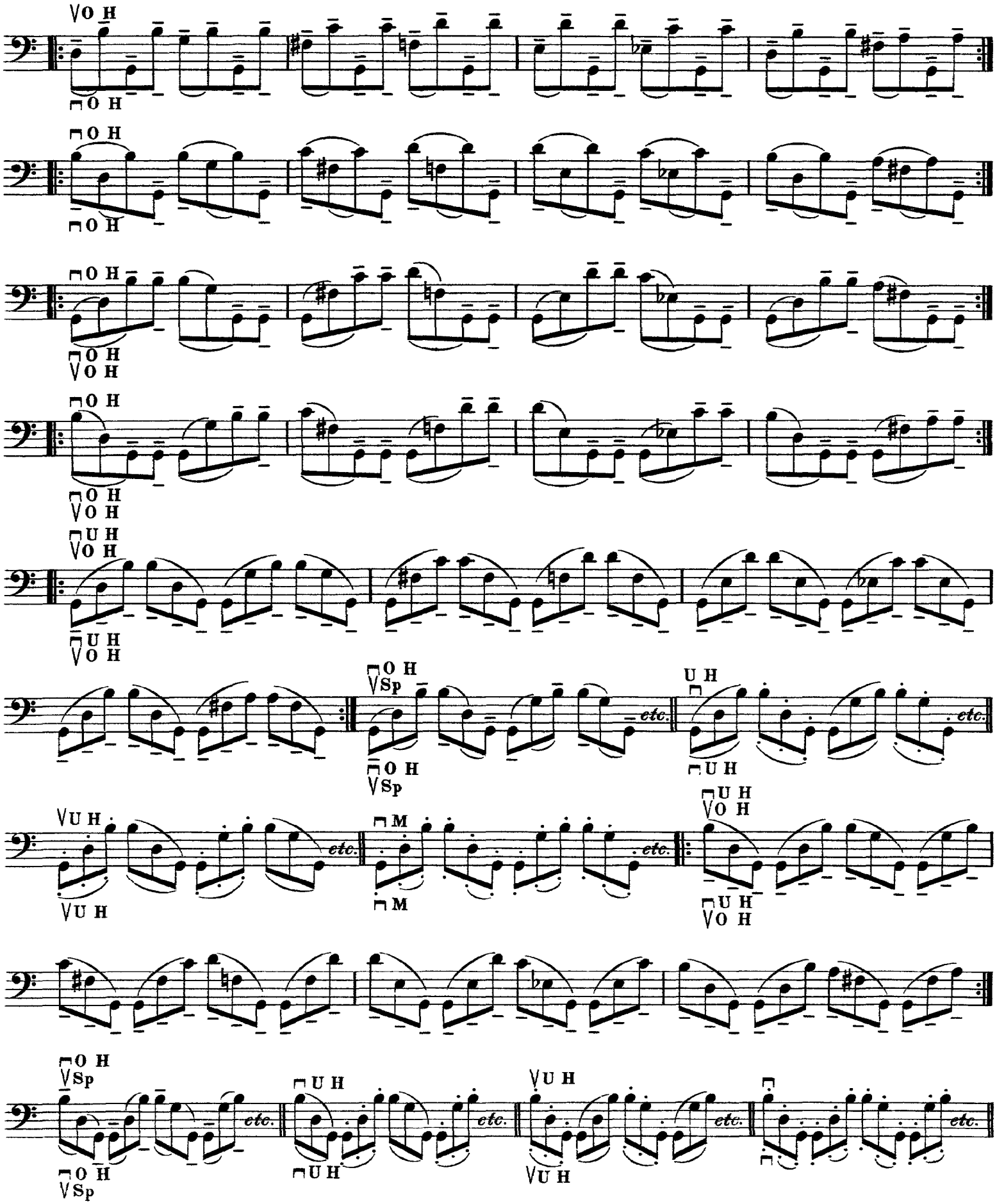
Ausführung
Execution
Exécution

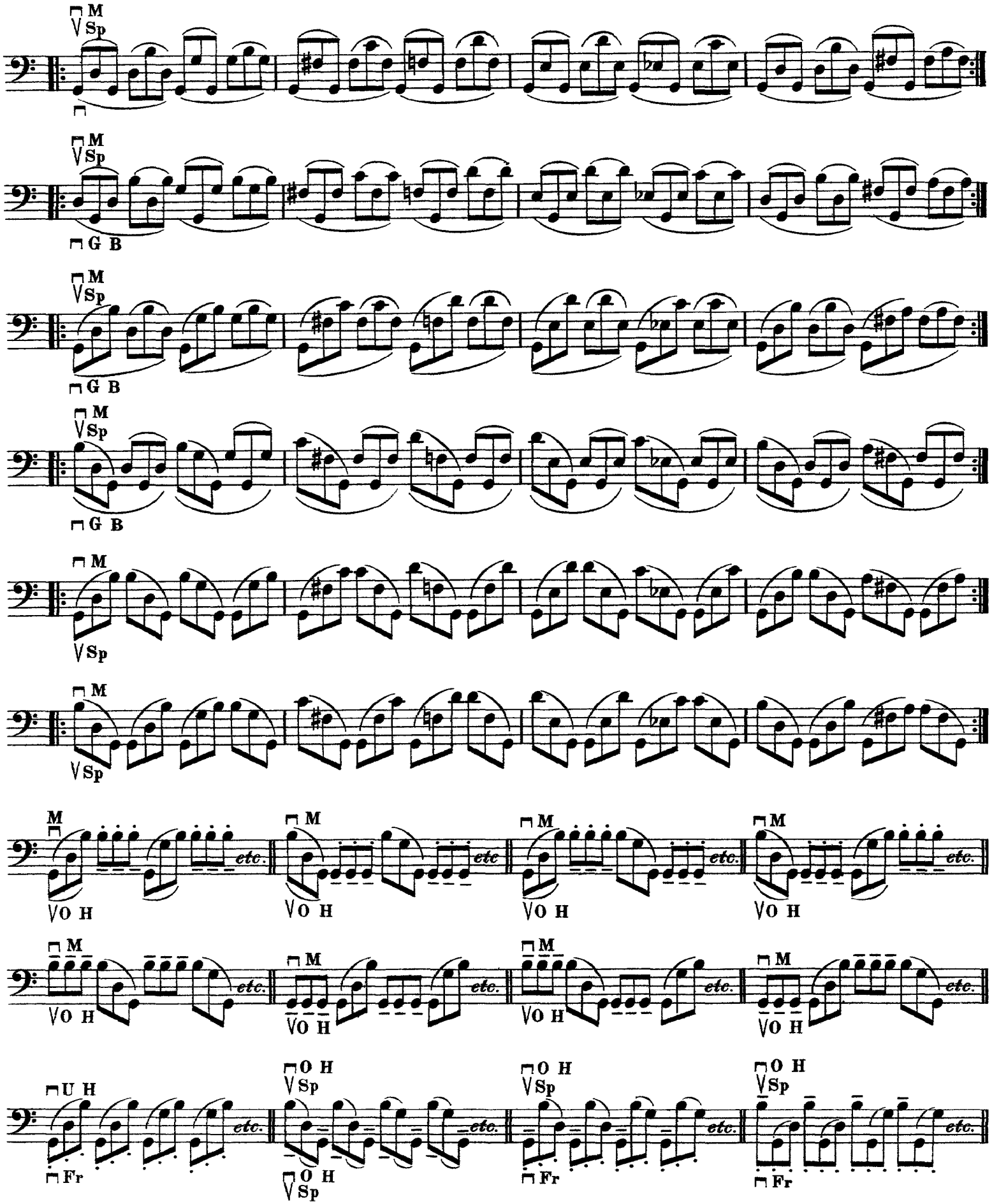


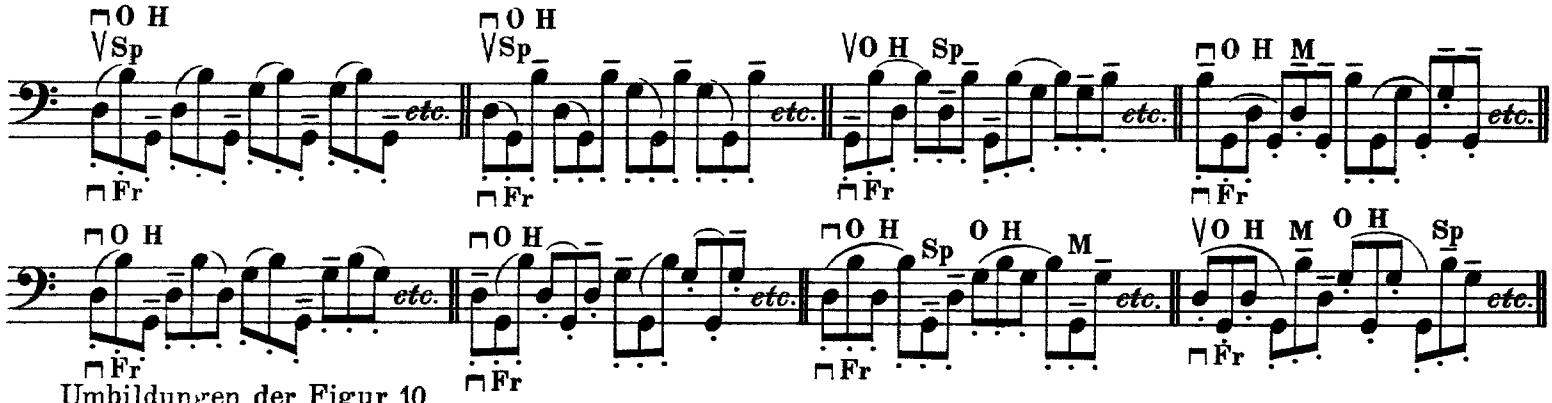

10.


G B
M
Sp
O H
O H
etc.
U H
M
Sp

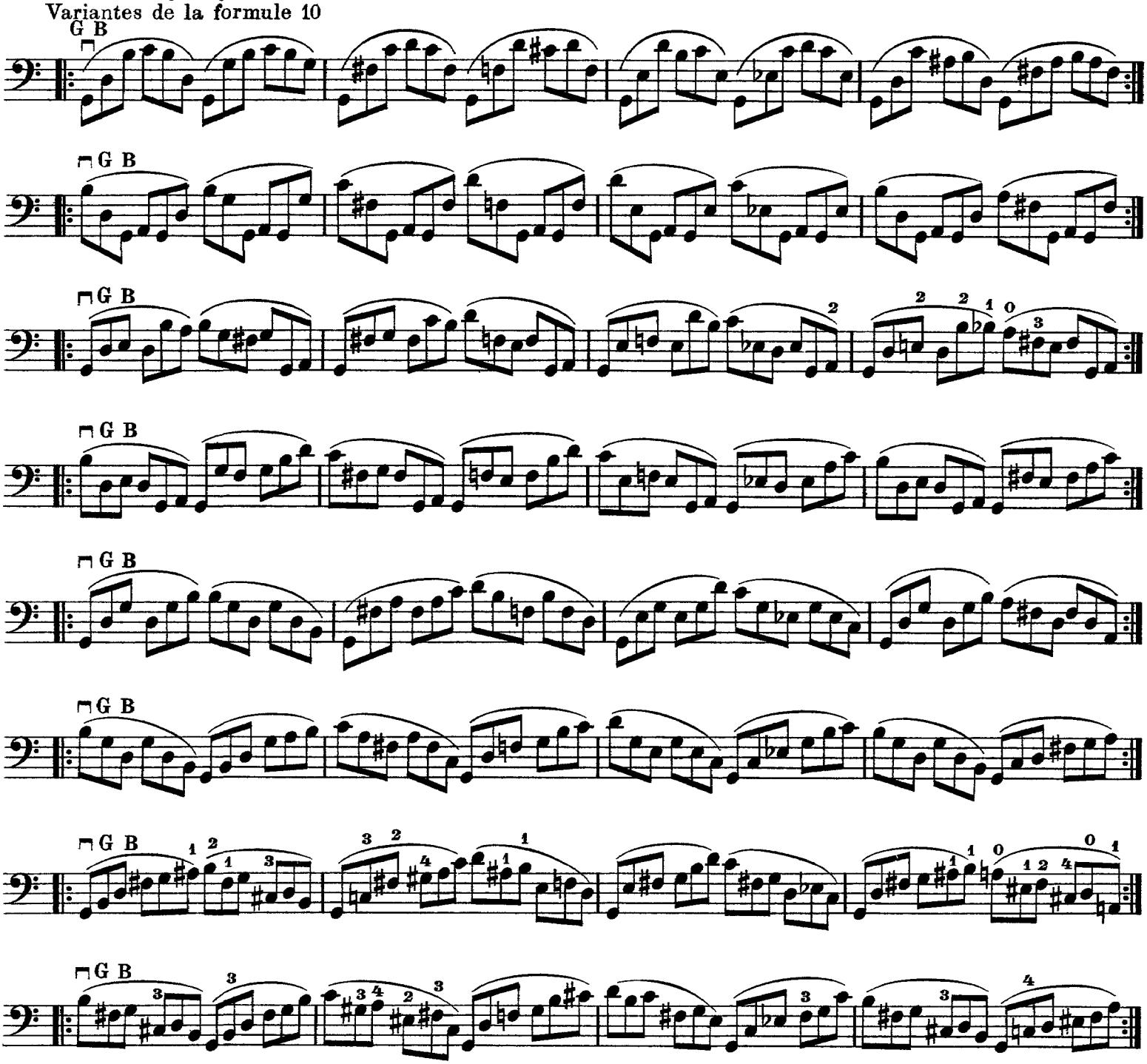

G B
M
Sp
Sp
O H
O H
etc.
O H
O H
O H
O H
etc.
U H
M
etc.
G B
M
Sp
etc.
G B
M
Sp
O H
O H
O H
O H
etc.
O H
O H
O H
O H
etc.
U H
M
etc.
G B
M
Sp
etc.
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
O H

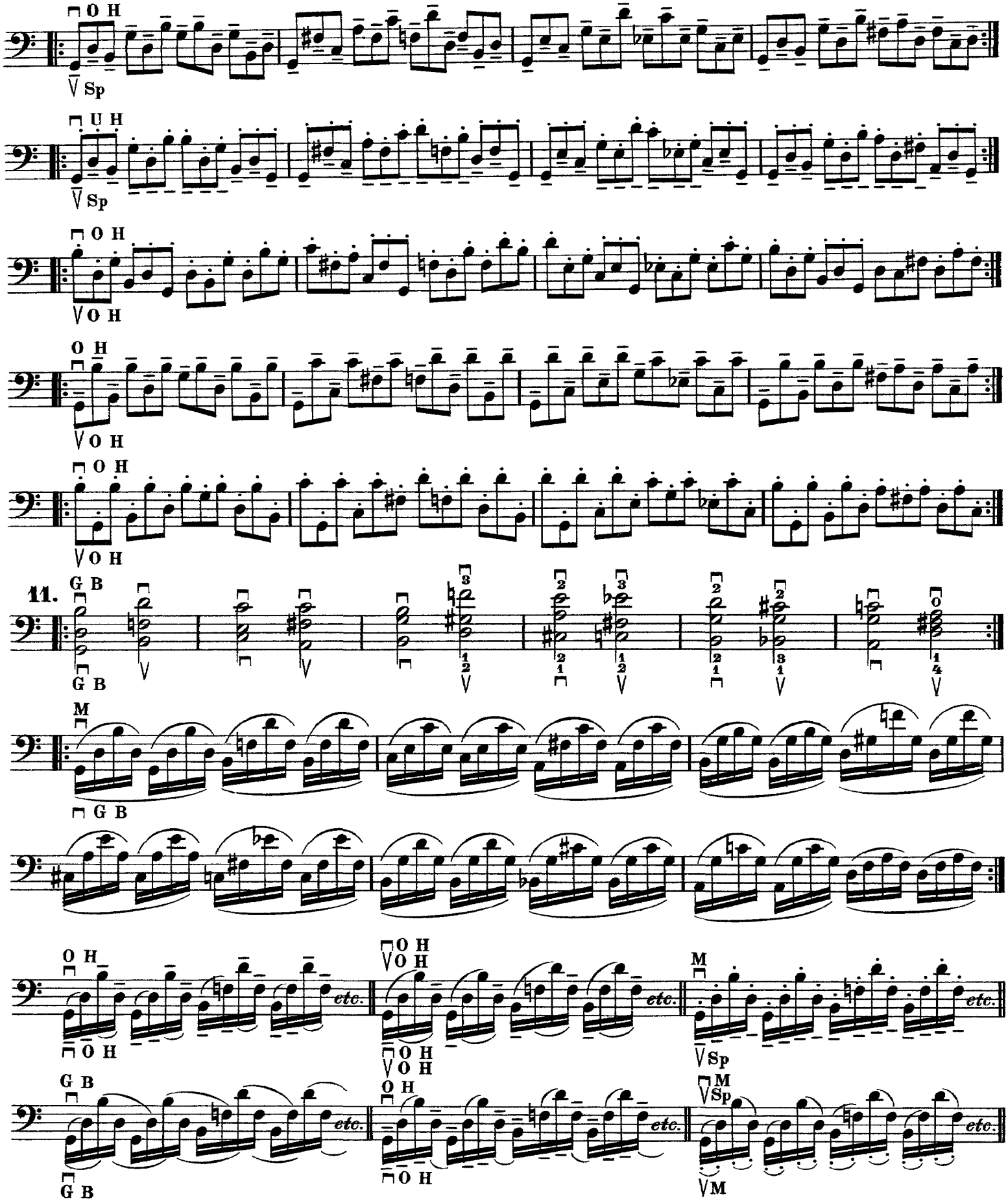

O H
O H
O H
O H
O H
O H
O H
O H
O H
O H
U H
O H
U H
O H
O H
Sp
O H
Sp
U H
U H
etc.
etc.
U H
etc.
M
M
etc.
U H
O H
U H
O H
O H
Sp
O H
Sp
U H
U H
U H
etc.
etc.
etc.
etc.

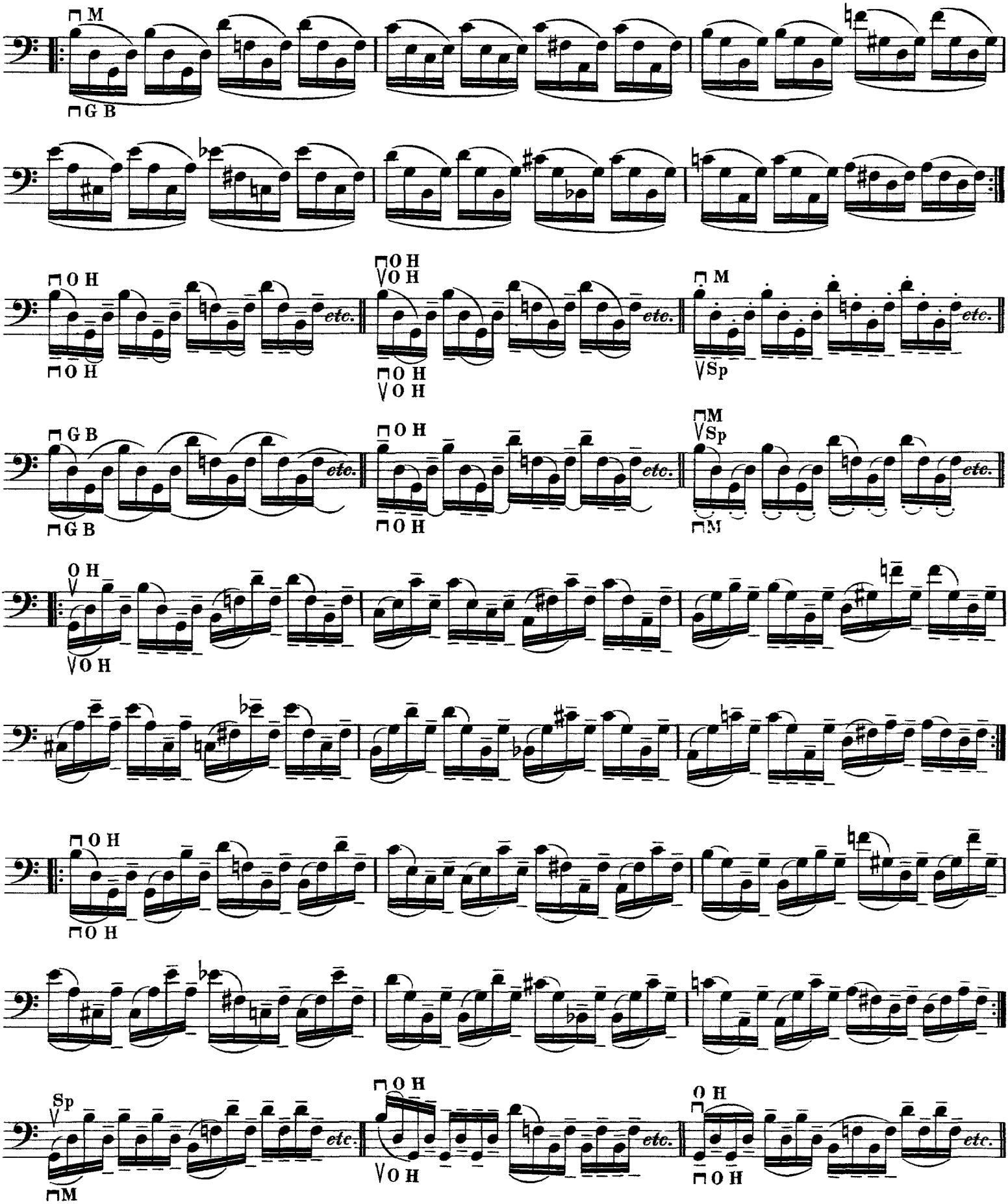

M
Sp
G B
O H
U H
Fr
etc.

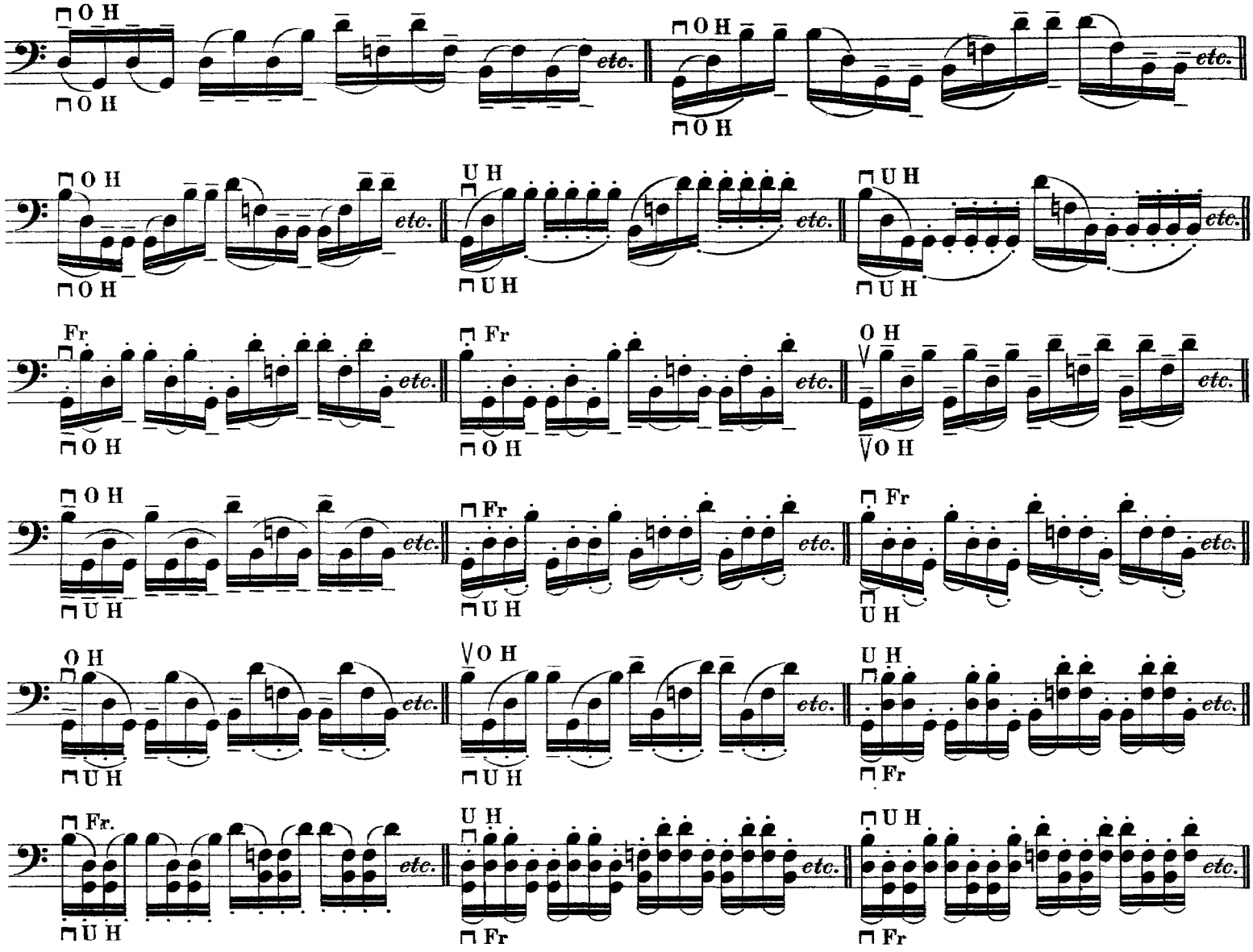


Umbildungen der Figur 10
Variations of Figure 10
Variantes de la formule 10

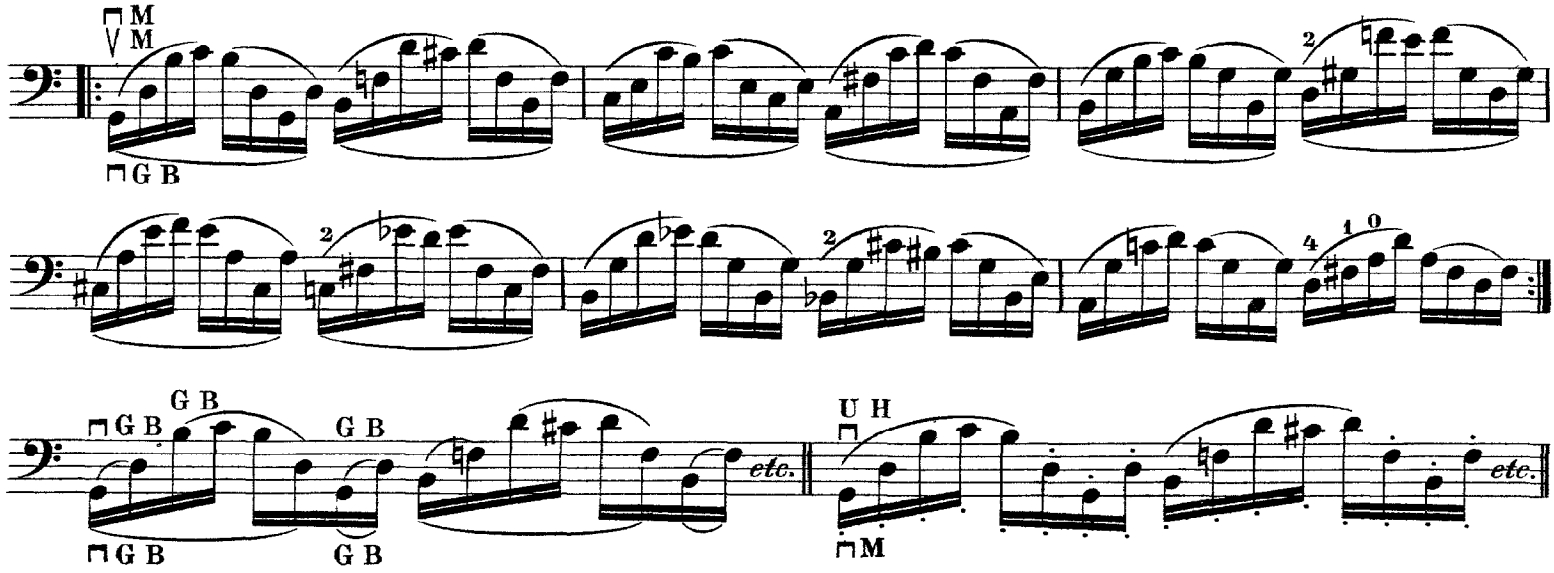


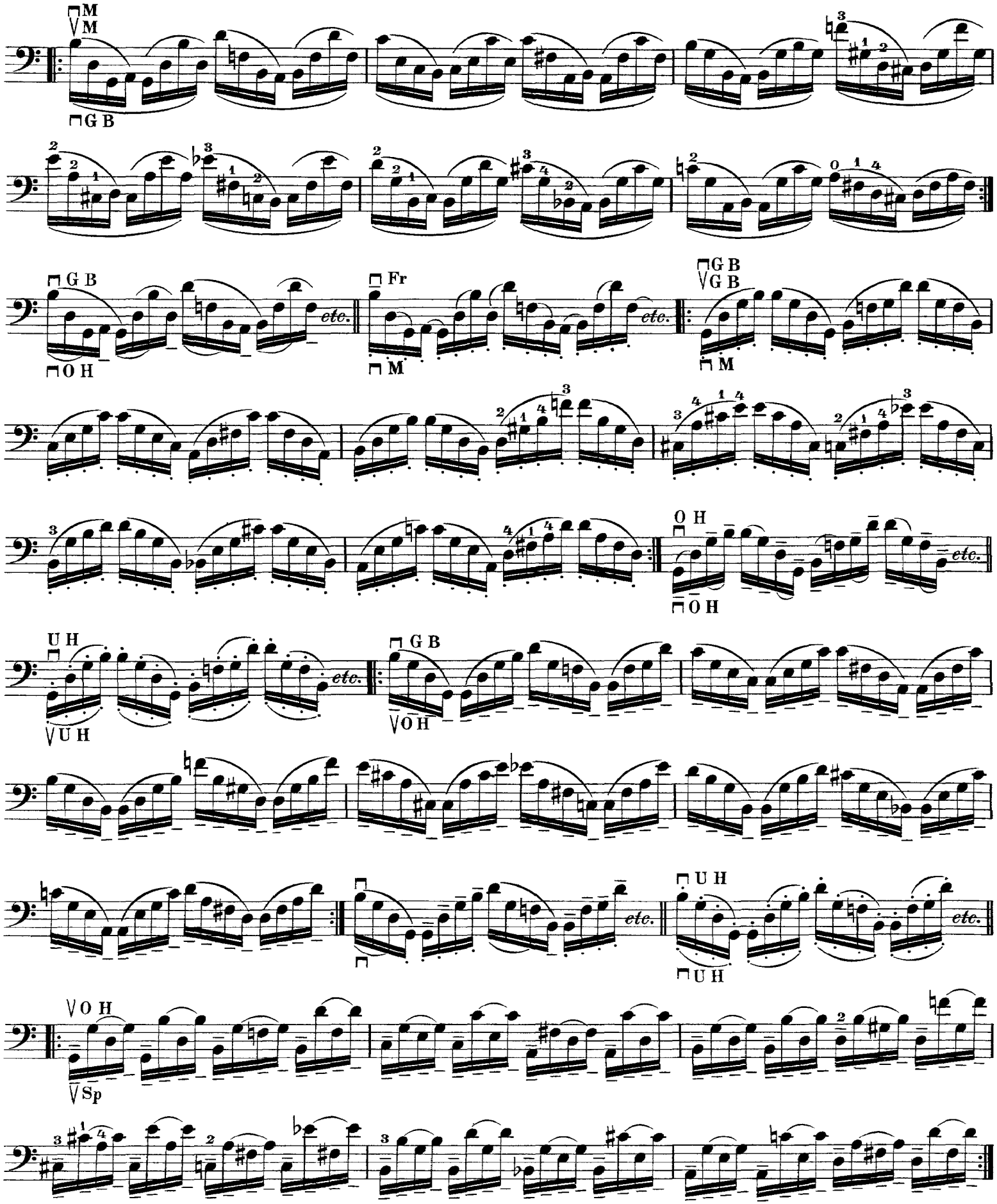

O H
Sp
U H
Sp
O H
O H
O H
O H
O H
O H
11.
G B
G B
M
G B
O H
O H
etc.
O H
O H
etc.
M
Sp
etc.
G B
G B
O H
O H
etc.
M
Sp
M
etc.

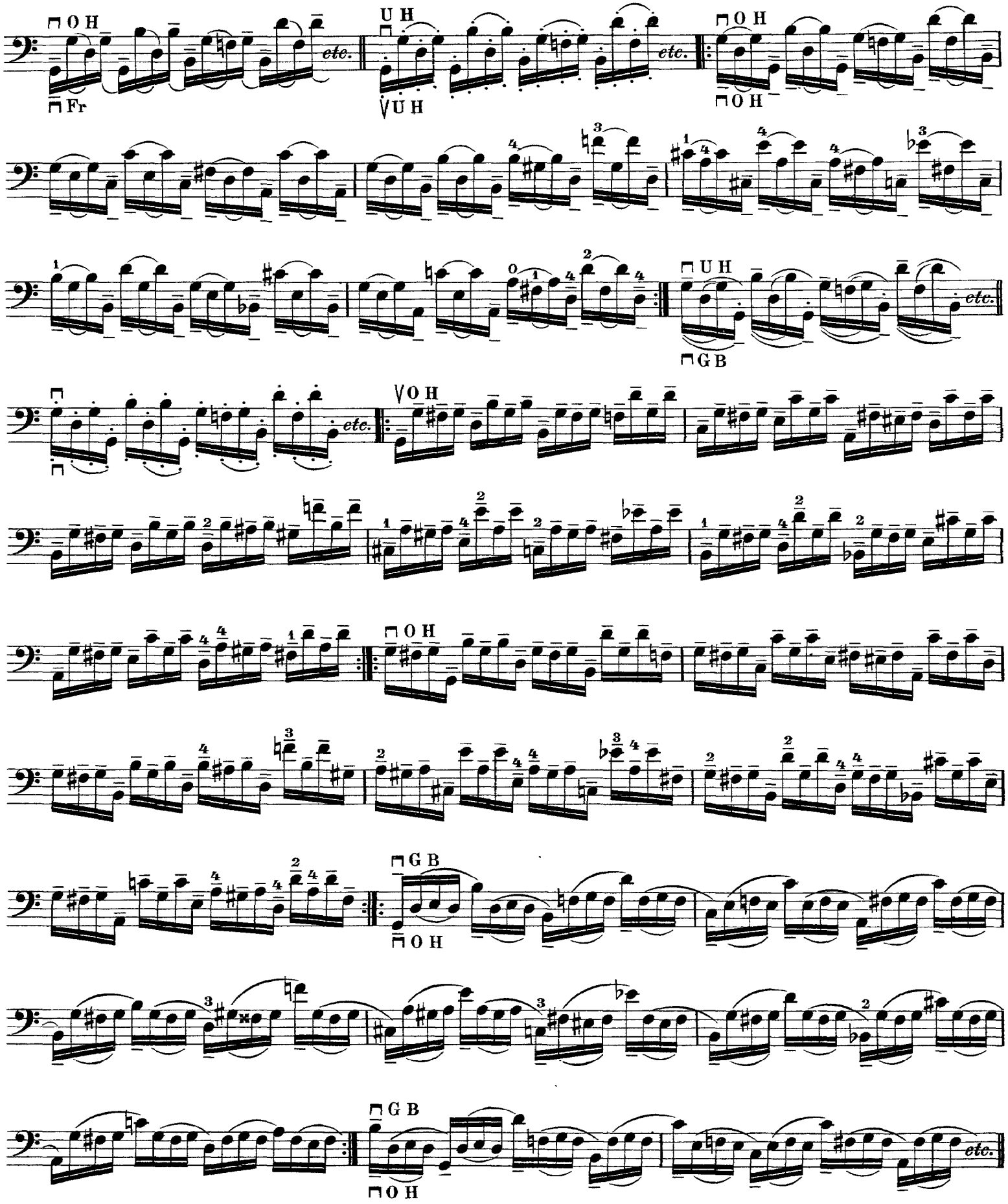

M
G B
O H
O H
O H
O H
O H
O H
M
Sp
G B
G B
O H
O H
M
Sp
M
O H
O H
O H
O H
Sp
M
O H
O H
O H
O H
etc.

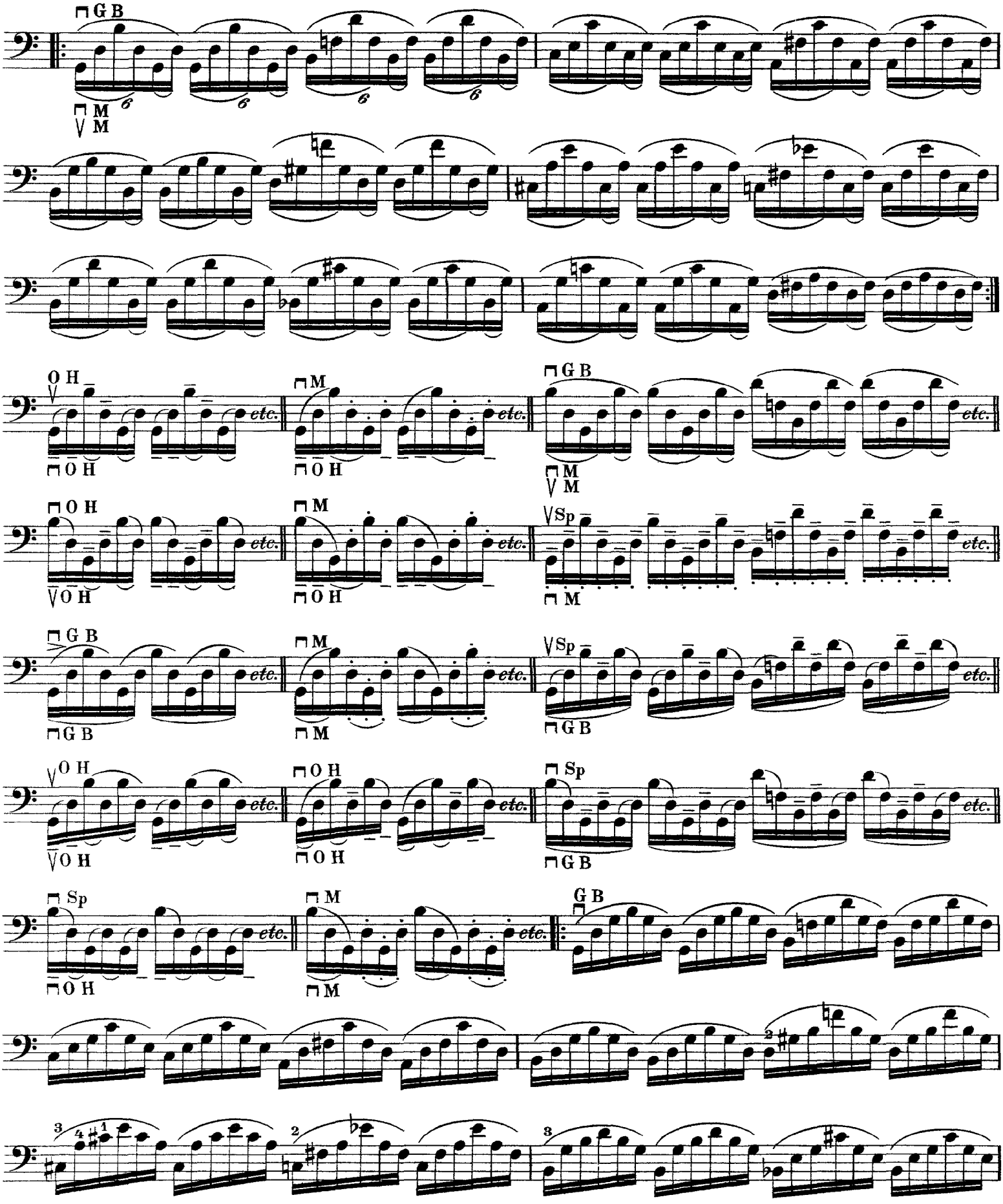


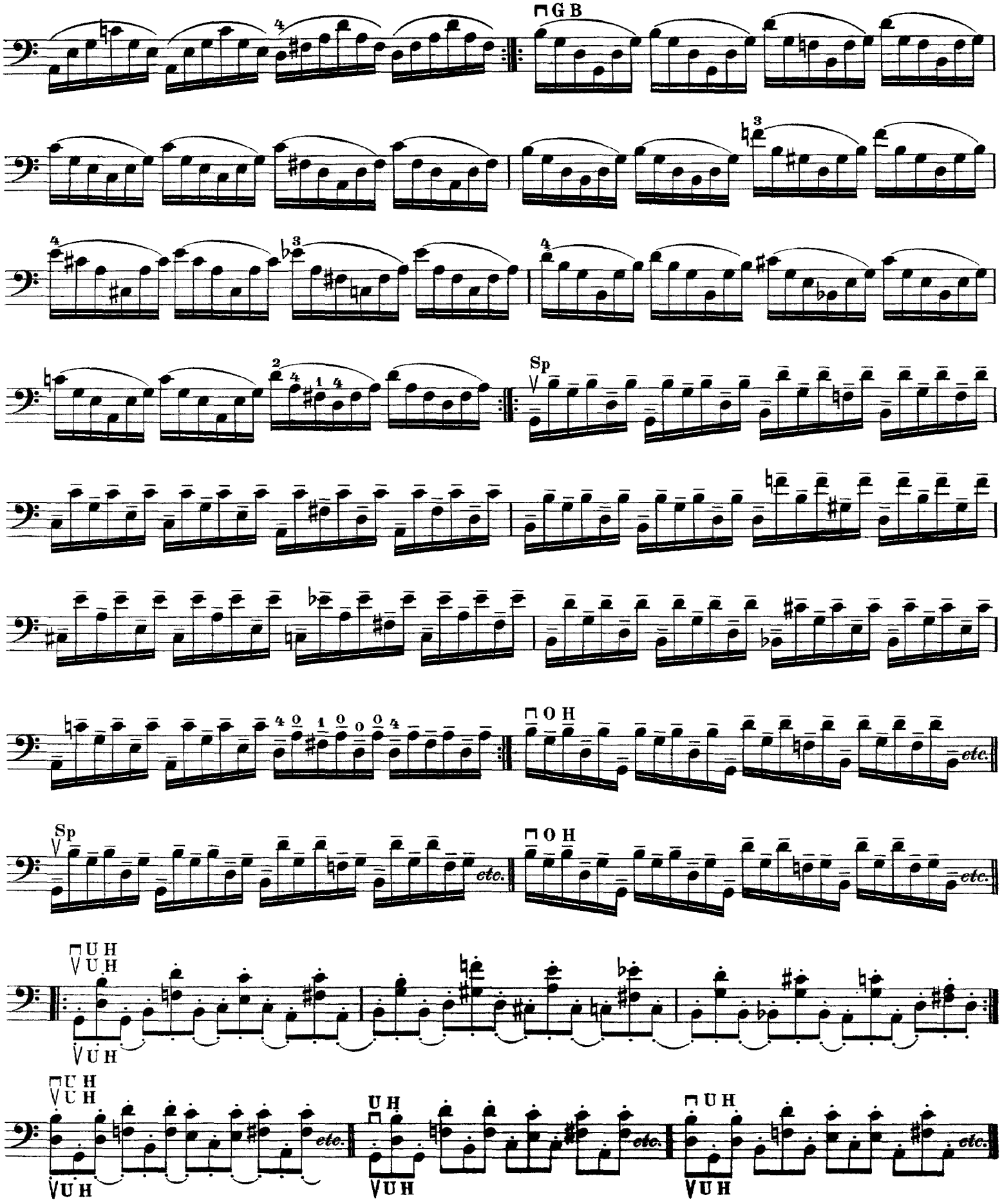
Umbildungen der Figur 11
Variations of Figure 11
Variantes de la formule 11




M
M
G B
G B
Fr
M
G B
G B
M
O H
O H
U H
U H
G B
O H
O H
U H
U H
Sp
etc.


O H
Fr
etc.
U H
U H
etc.
O H
O H
U H
G B
etc.
O H
etc.
O H
G B
O H
G B
O H
etc.


G B
M
M
O H
O H
etc.
Sp

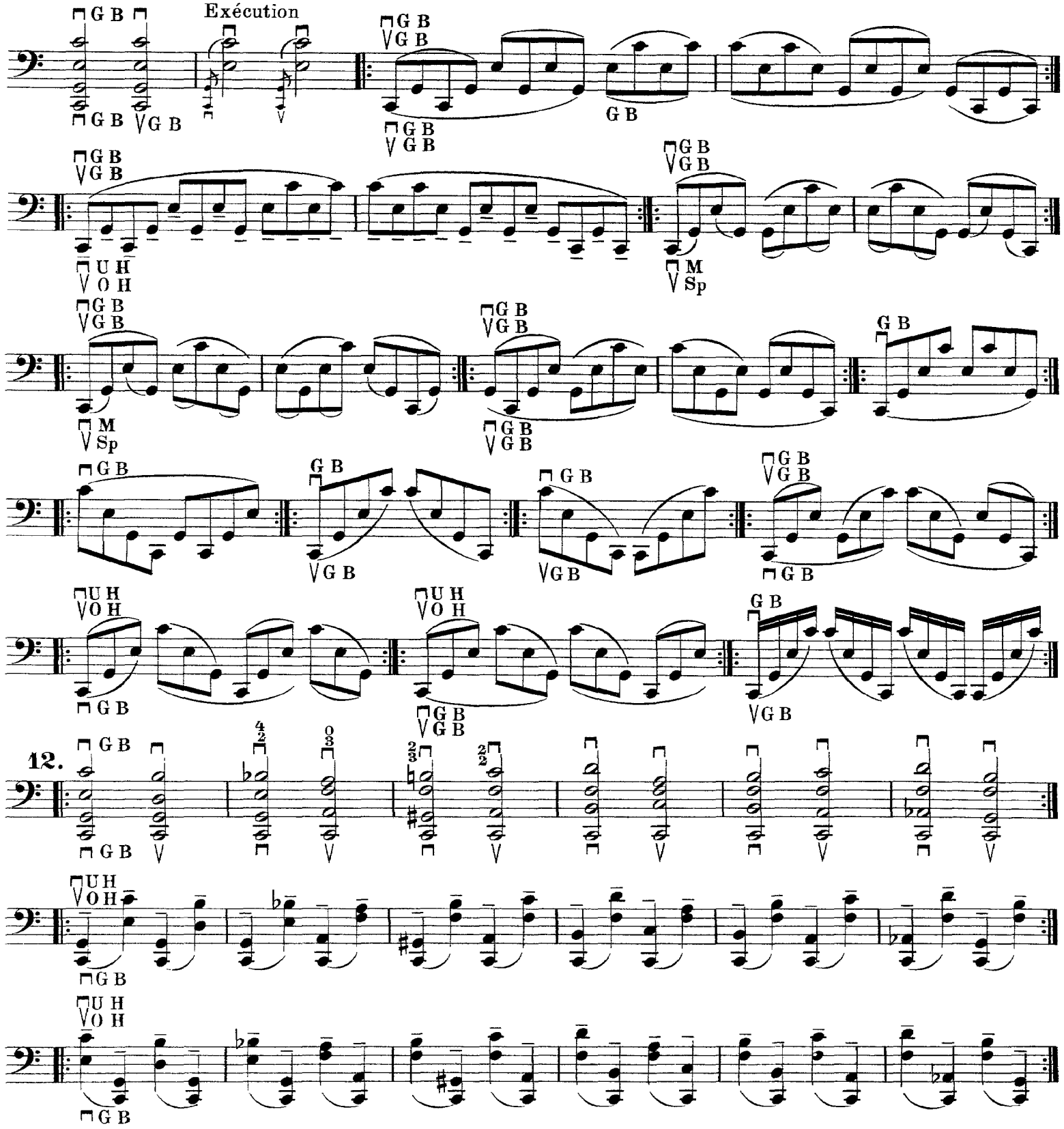

GB
Sp
O H
etc.
Sp
O H
etc.
U H
U H
U H
U H
etc.
U H
U H
etc.
U H
U H
etc.

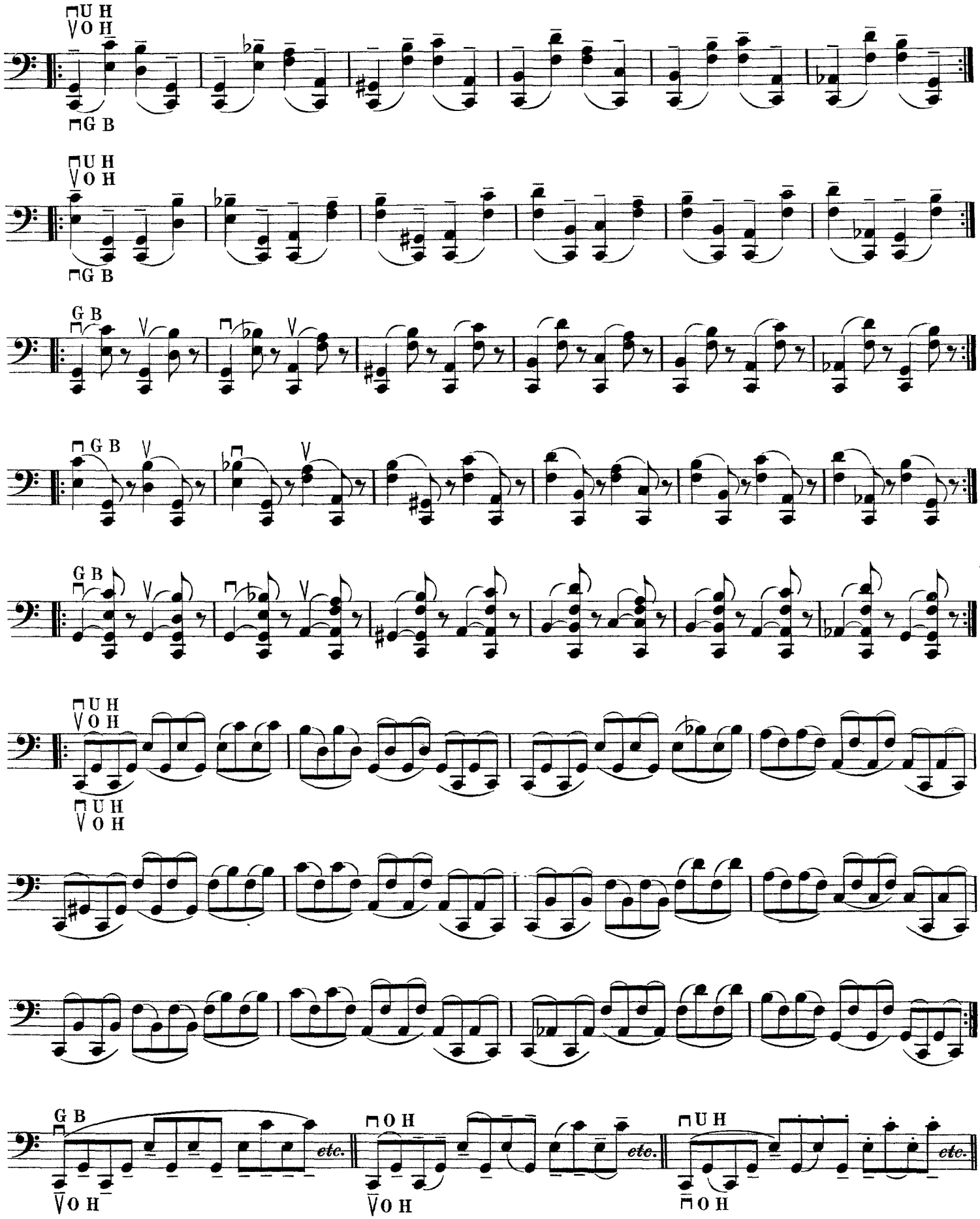
Übungen auf 4 Saiten

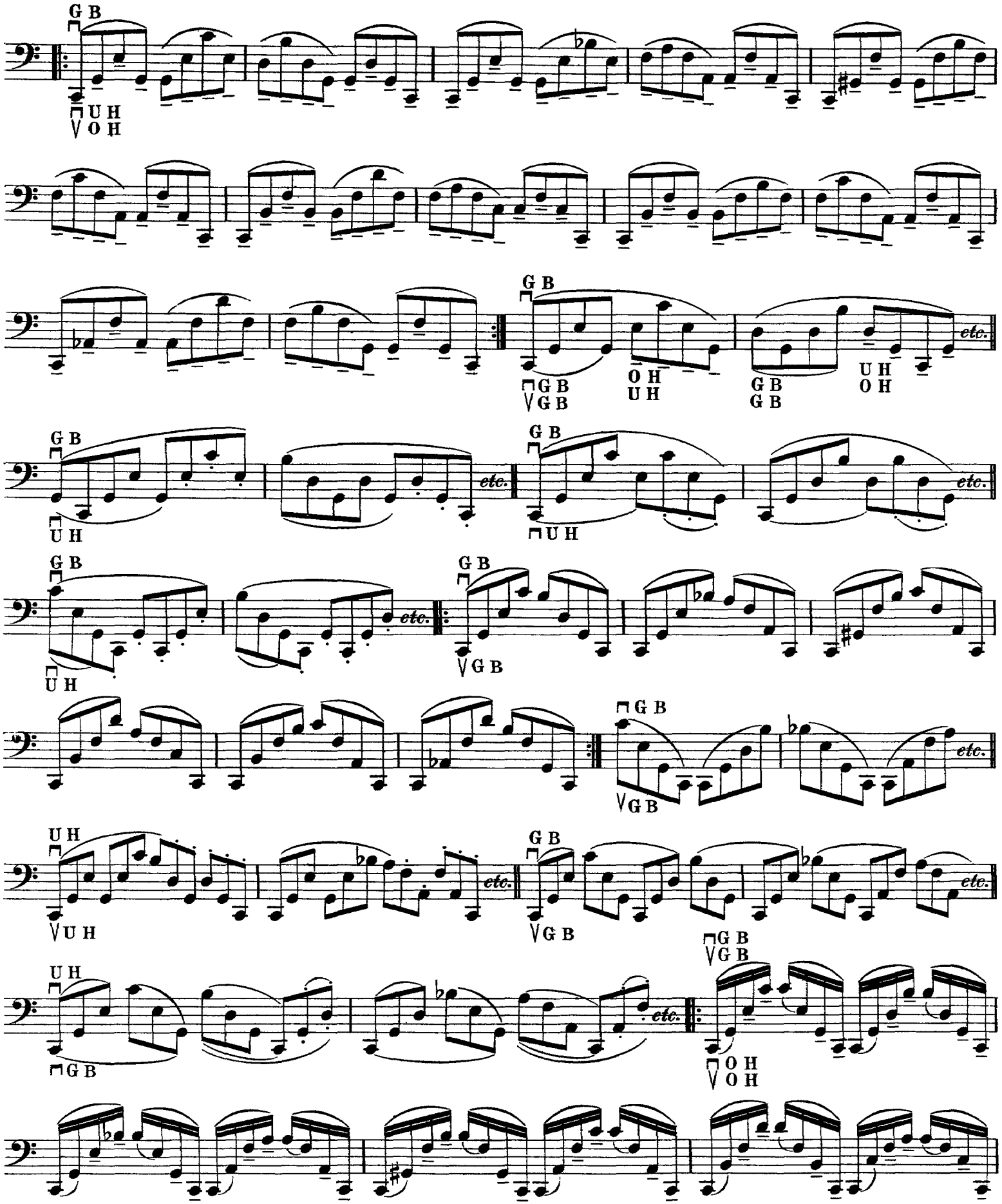
Exercises on 4 Strings Exercices sur 4 cordes

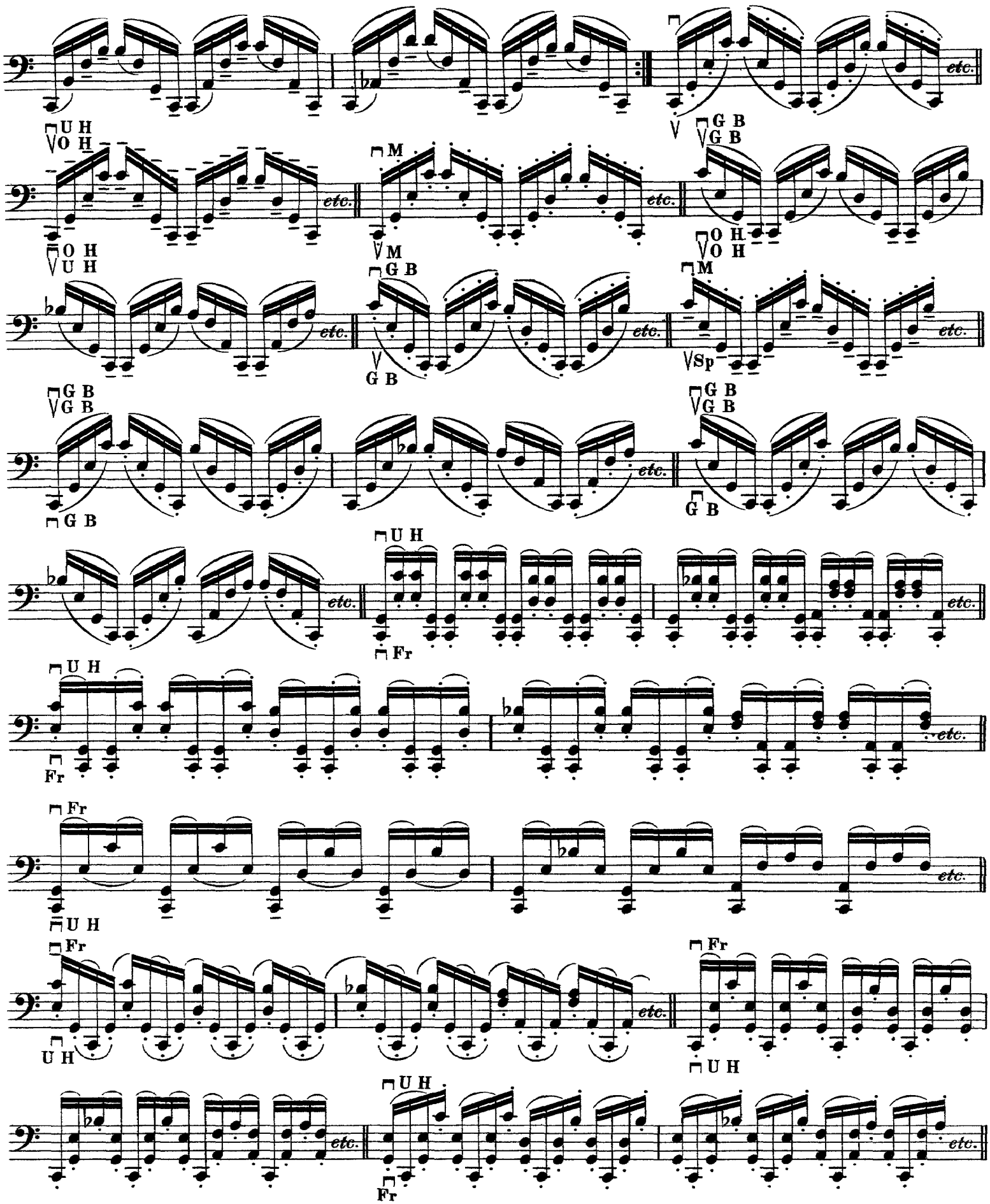
Vorübungen. *Preparatory Exercises.* Exercices préparatoires

Ausführung
Execution
Exécution

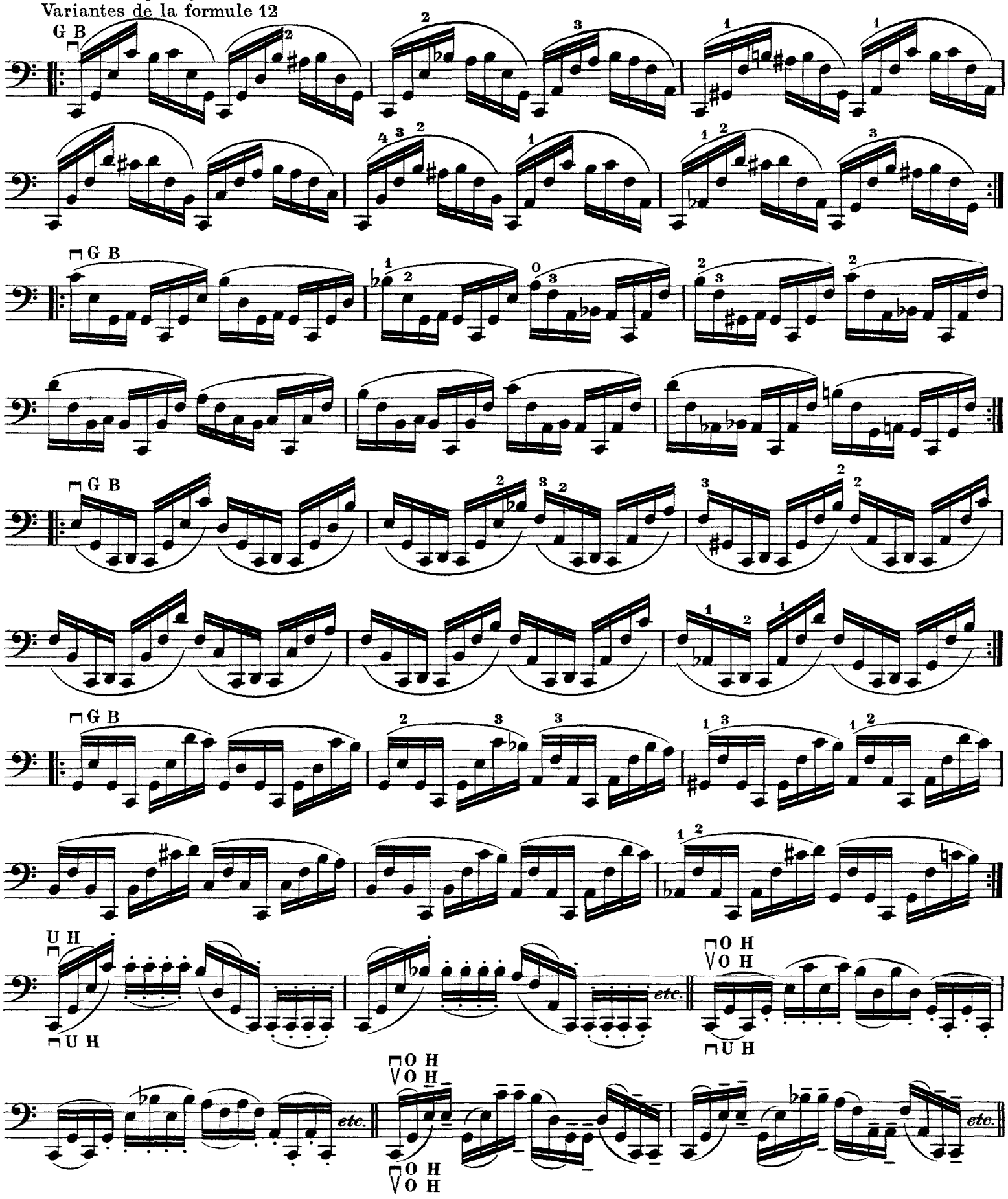


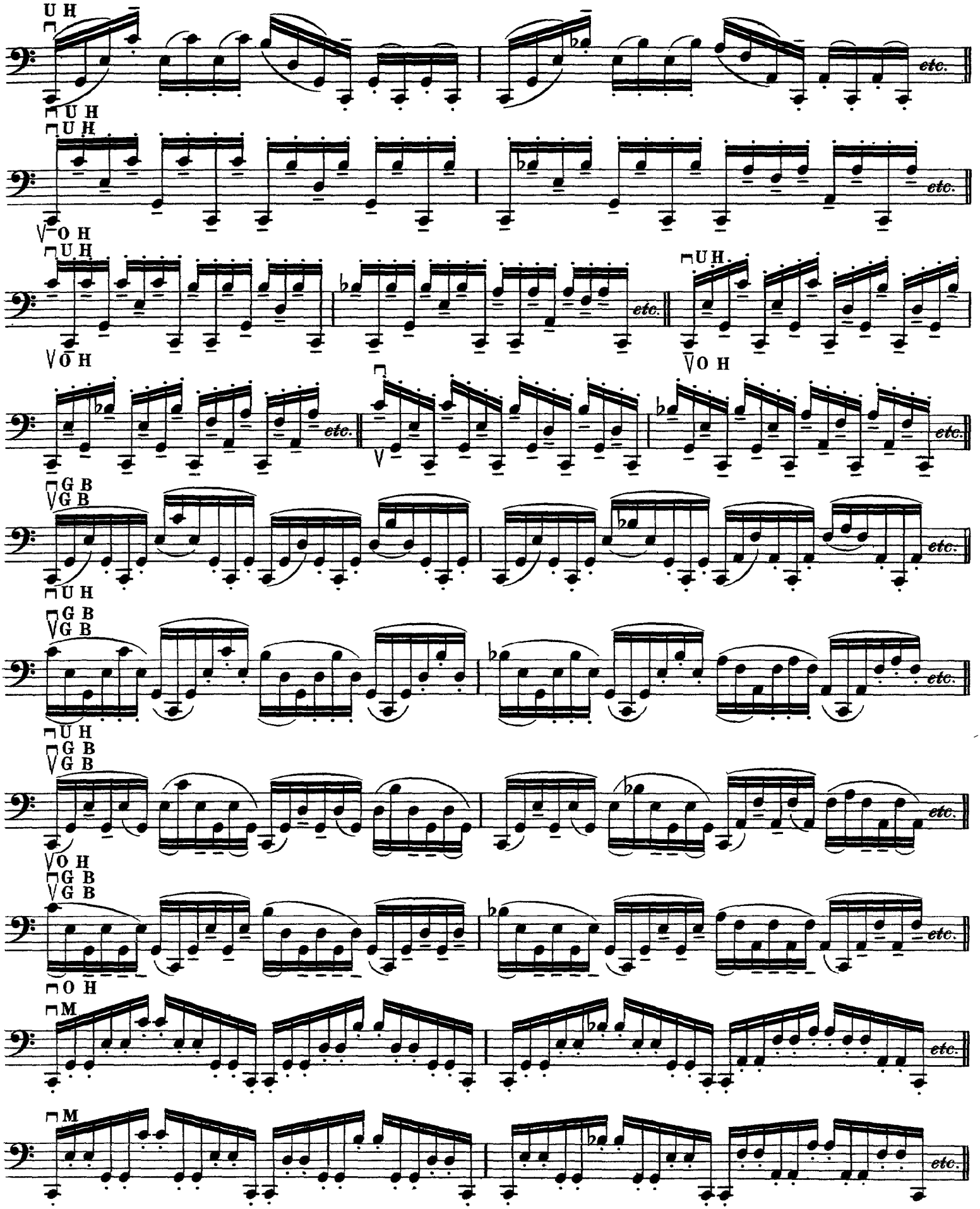

U H
O H
G B
etc.

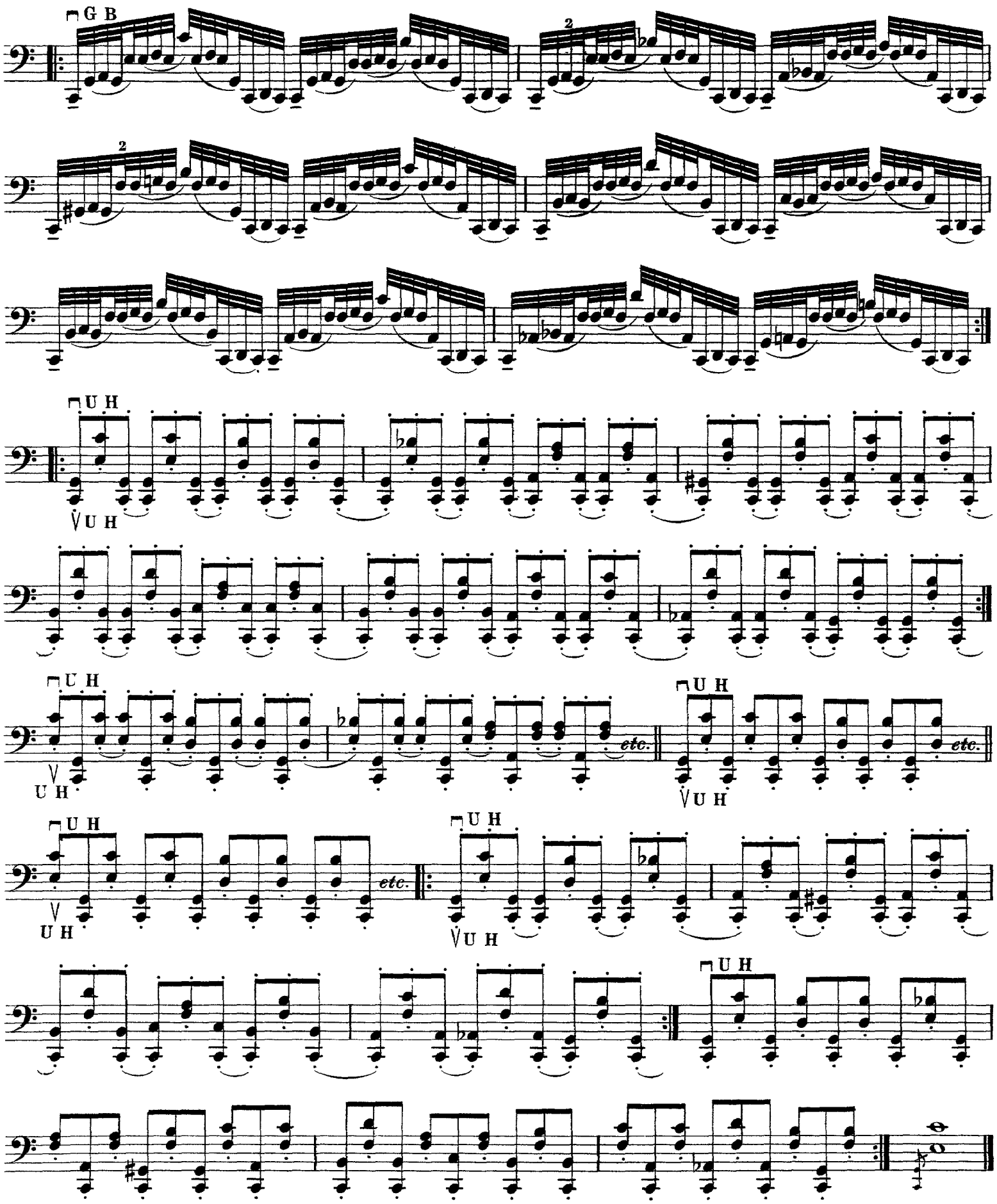

G B
U H
O H
G B
G B
O H
U H
G B
G B
U H
O H
etc.
G B
U H
etc.
G B
U H
etc.
G B
U H
etc.
G B
G B
etc.
G B
U H
etc.
U H
U H
etc.
G B
G B
etc.
U H
G B
etc.
G B
G B
O H
O H


U H
O H
etc.
M
G B
O H
Sp
Fr

Umbildungen der Figur 12
Variations of Figure 12
Variantes de la formule 12




U H
U H
U H
O H
U H
O H
U H
O H
etc.
G B
G B
U H
G B
G B
U H
G B
G B
O H
G B
G B
O H
M
M


G B
2
2
U H
U H
U H
U H
etc.
U H
etc.
U H
U H
etc.
U H
U H
U H

Part 3

Übungen im Daumenaufsatz

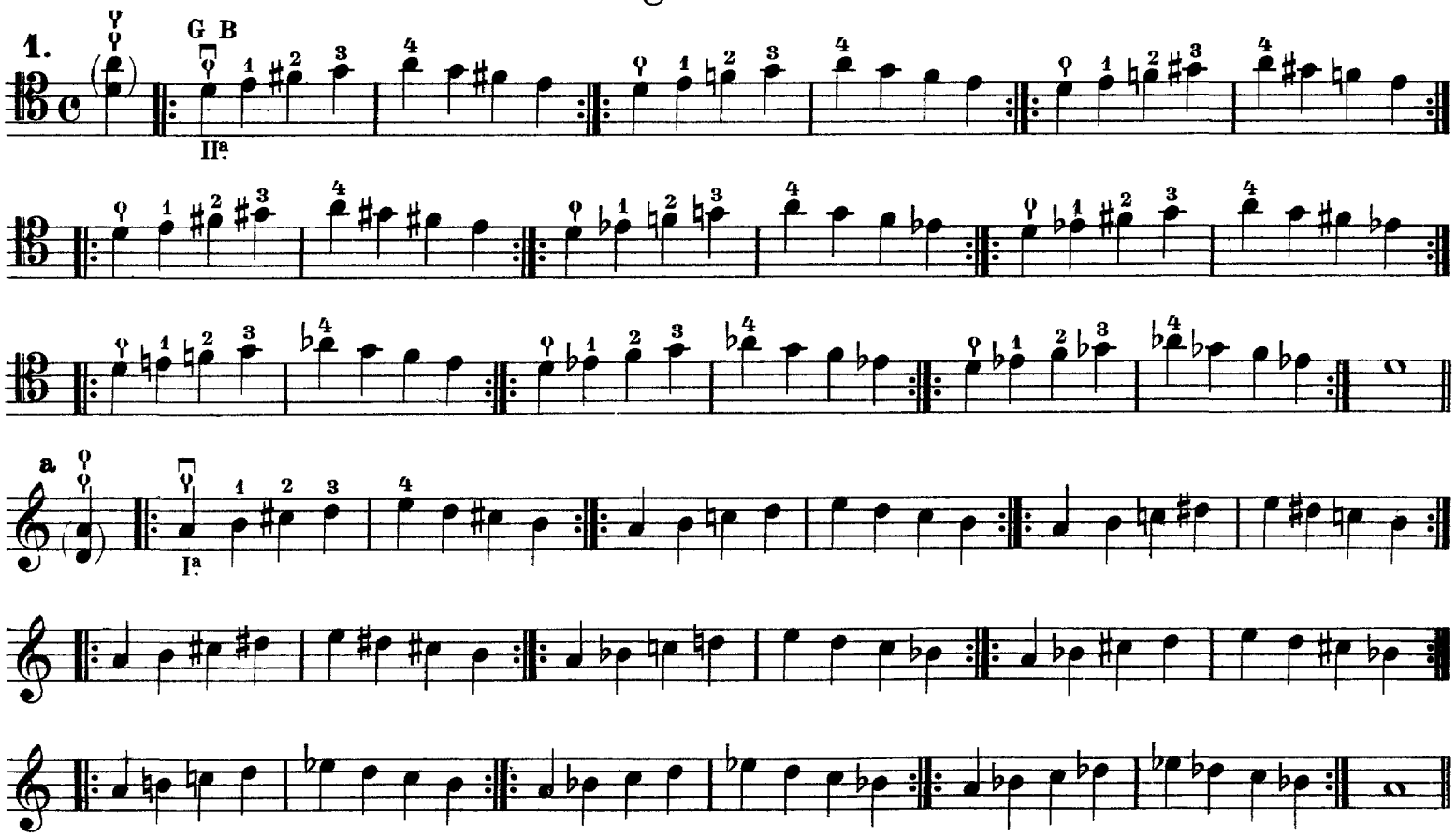
Exercises in thumb positions Les positions du pouce

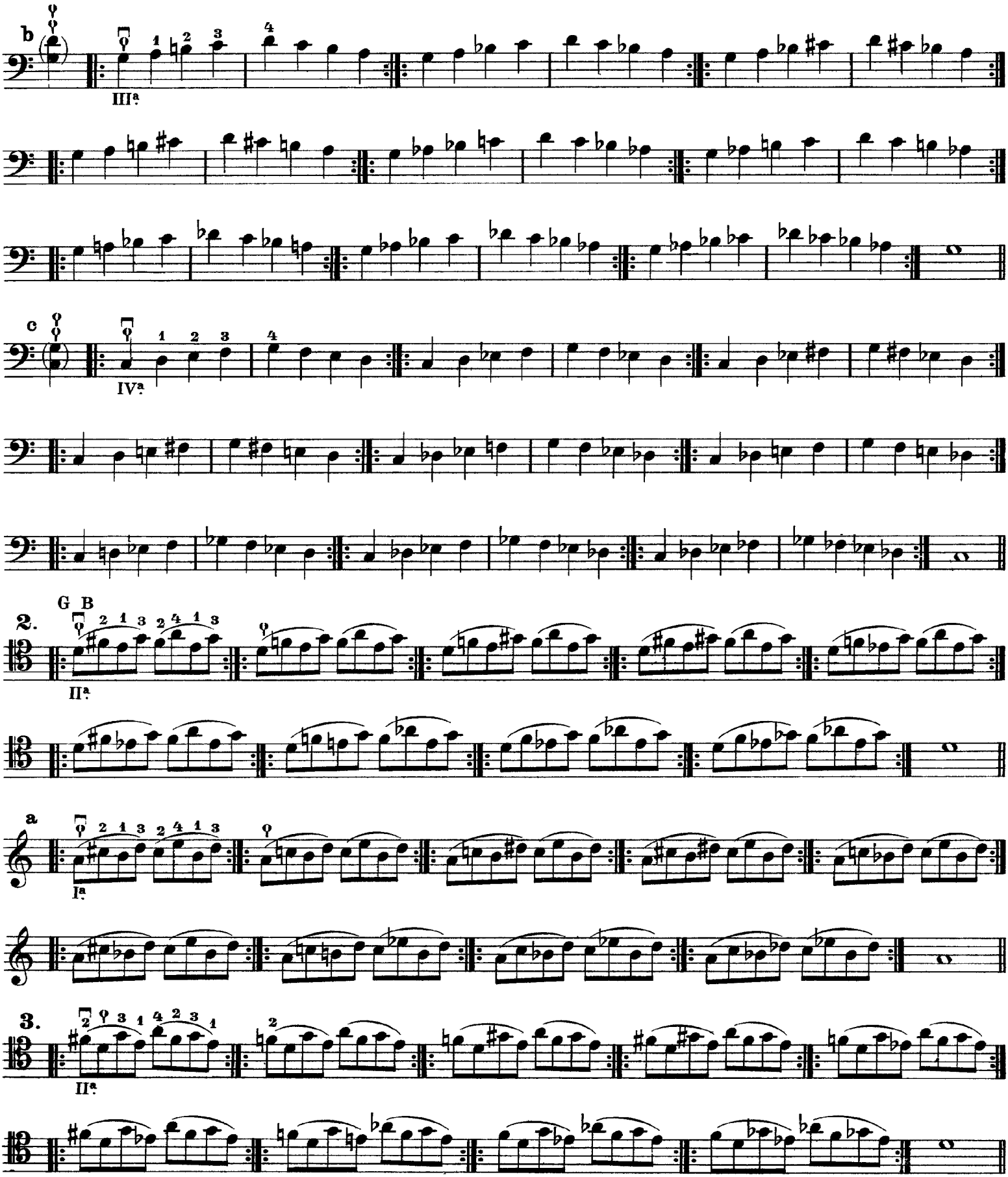
⊓	Abstrich. *Down-bow.* Tiré.
V	Aufstrich. *Up-bow.* Poussé.
G B	Ganze Bogenlänge, von der Spitze bis zum Frosch und umgekehrt. *With the whole of the bow, from the point to the nut and vice versa.* De toute la longueur de l'archet, de la pointe au talon et vice versa.
O H	Obere Hälfte des Bogens von der Spitze bis zur Mitte und umgekehrt. *Upper half of the bow, from the point to the middle and vice versa.* Moitié supérieure de l'archet, de la pointe au milieu et vice versa.
U H	Untere Hälfte des Bogens von der Mitte bis zum Frosch und umgekehrt. *Lower half of the bow, from the middle to the nut and vice versa.* Moitié inférieure de l'archet, du milieu au talon et vice versa.
Sp	An der Spitze des Bogens. *At the point of the bow.* A la pointe de l'archet.
M	In der Mitte. *In the middle of the bow.* Au milieu de l'archet.
Fr	Am Frosch. *At the nut of the bow.* Au talon.
♀	Daumen liegen lassen. *Leave the thumb down.* N'ôtez pas le pouce.
I.ª	A Saite. *A string.* Corde de la.
II.ª	D Saite. *D string.* Corde de ré.
III.ª	G Saite. *G string.* Corde de sol.
IV.ª	C Saite. *C string.* Corde d'ut.

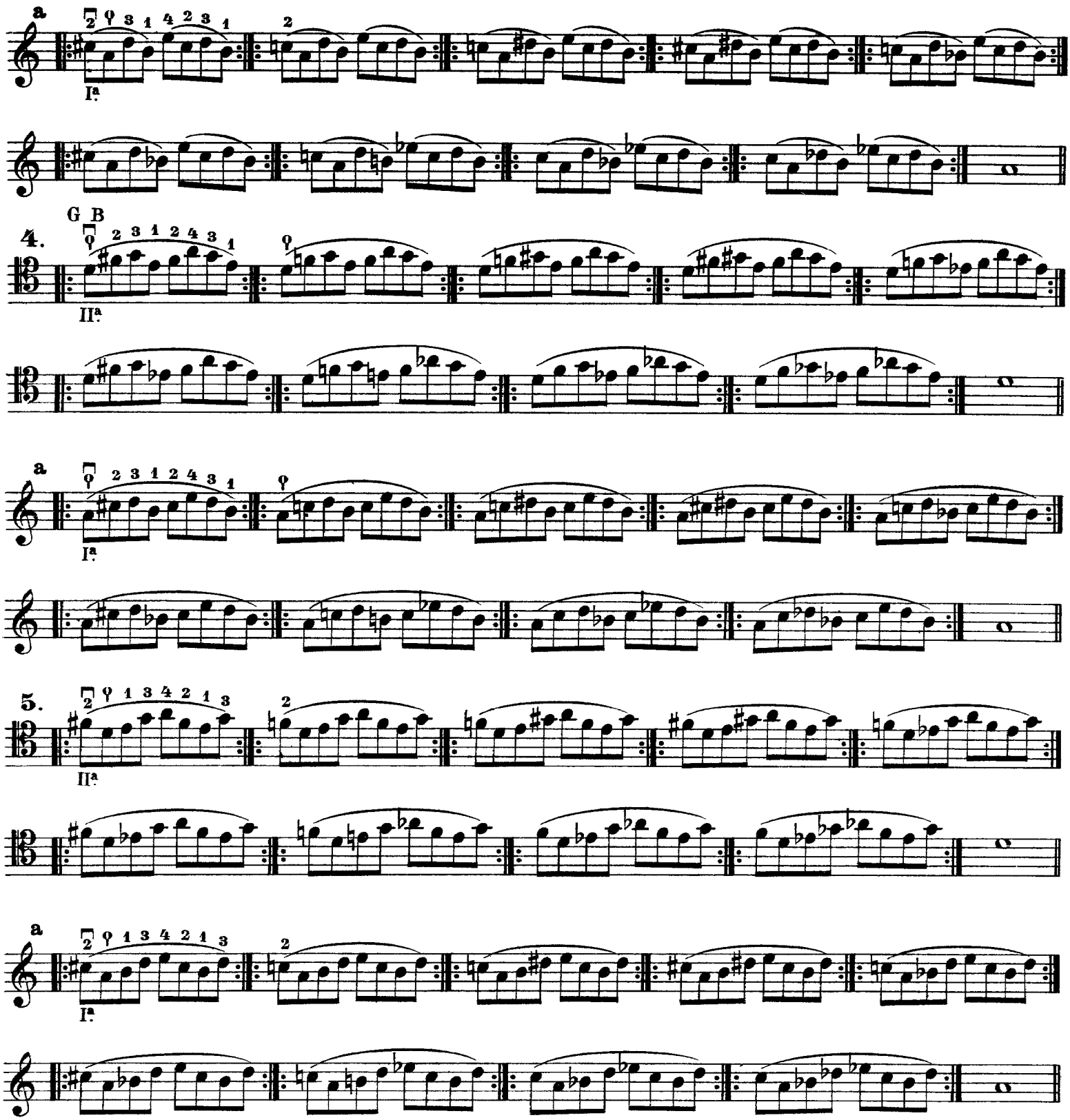
I.

Übungen auf einer Saite

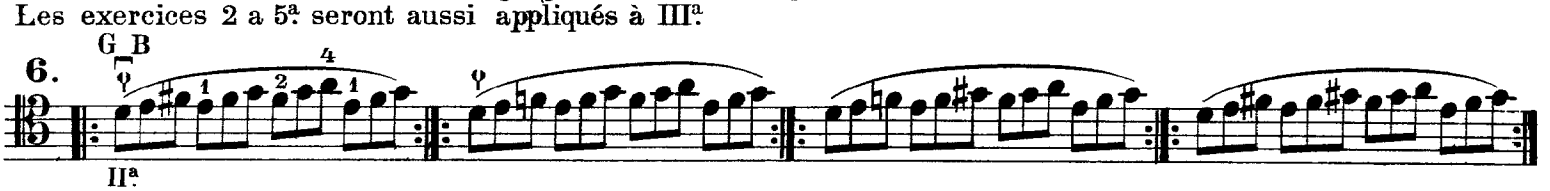
Exercises on one string Exercices sur une corde

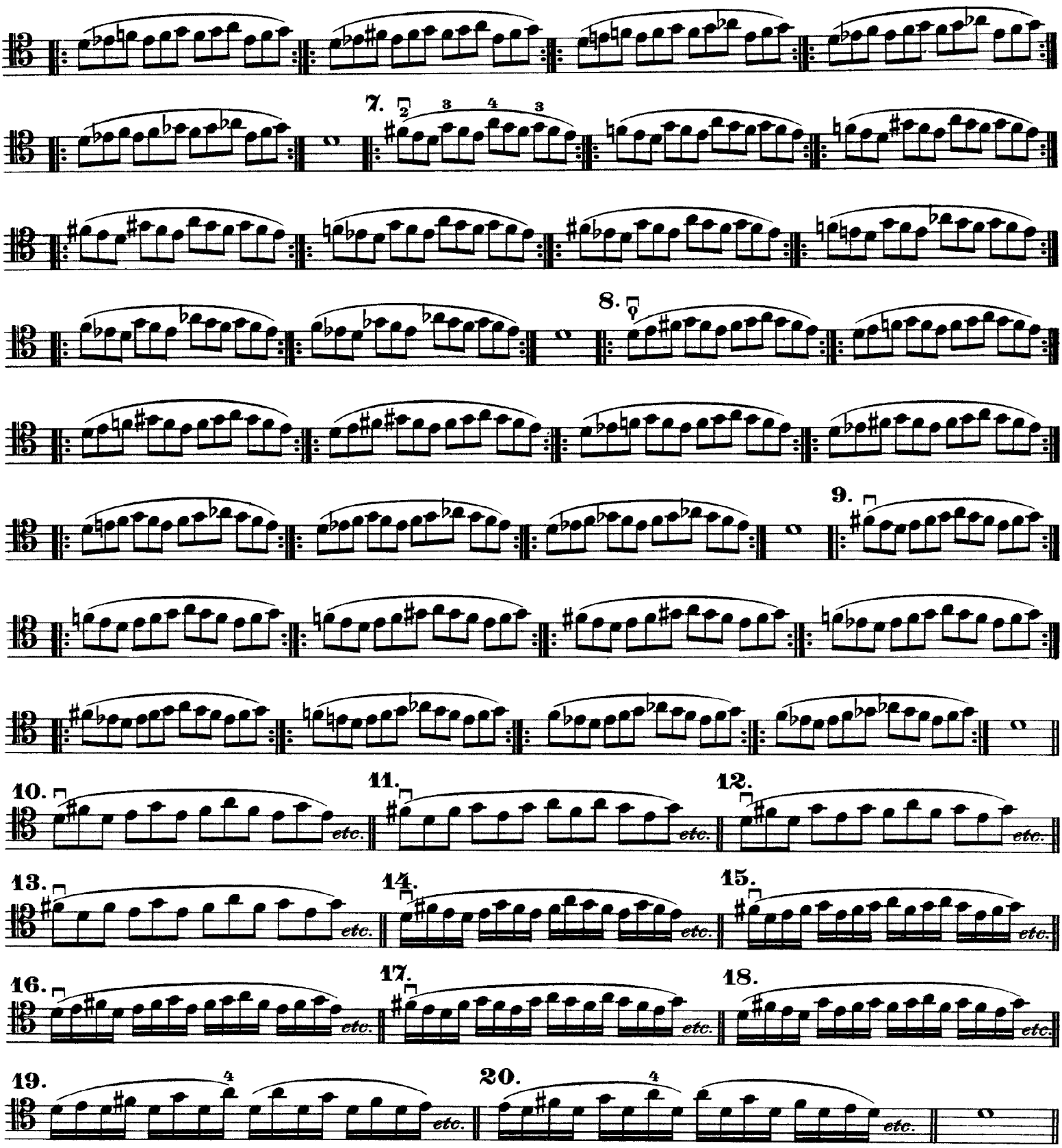



b
IIIª
c
IVª
2.
G B
IIª
a
Iª
3.
IIª



Die Übungen 2 bis 5.ª sind auch auf III.ª zu übertragen.
The exercises 2 - 5.ª are also to be played on the G string (III.ª)
Les exercices 2 a 5.ª seront aussi appliqués à III.ª



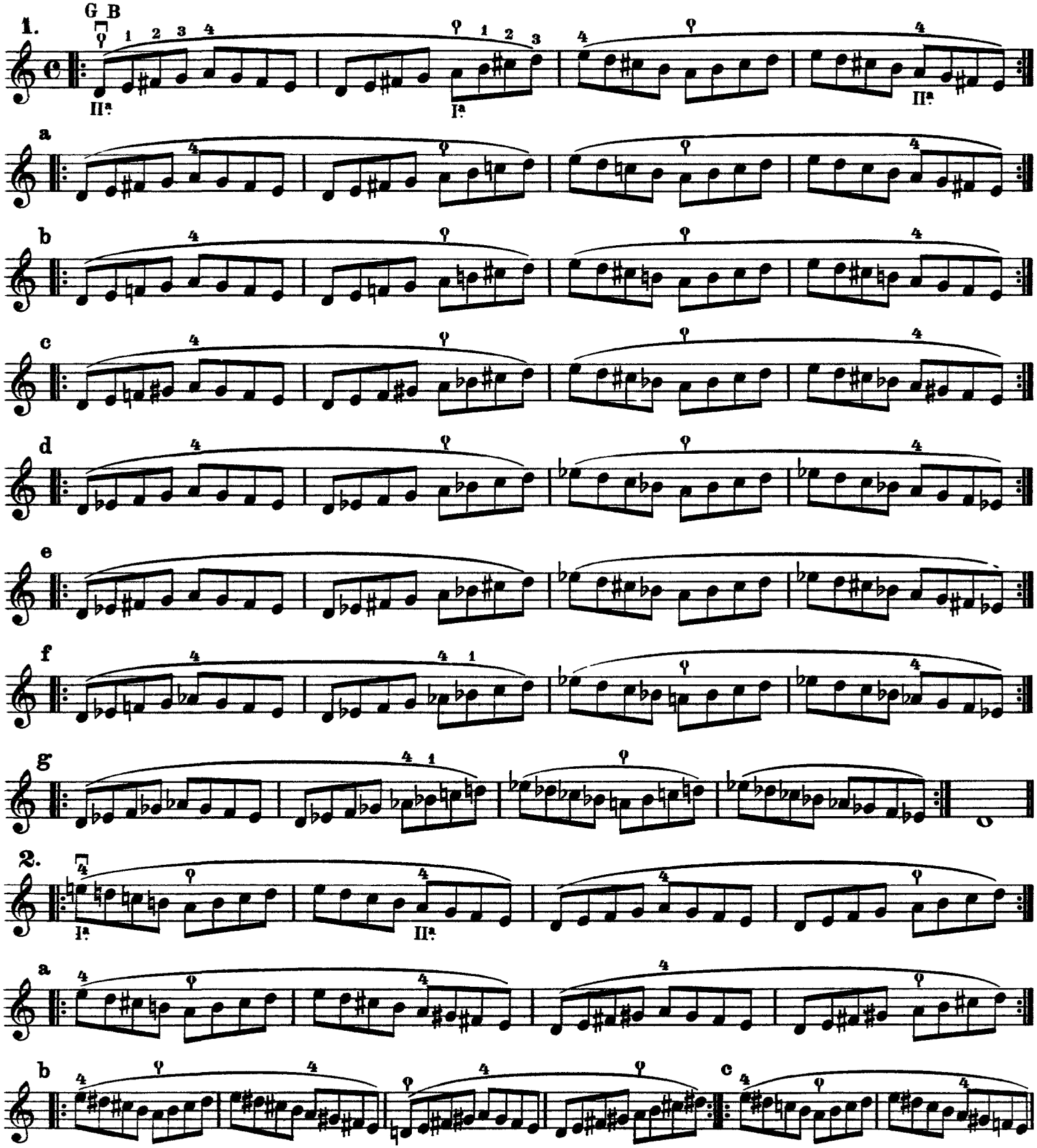


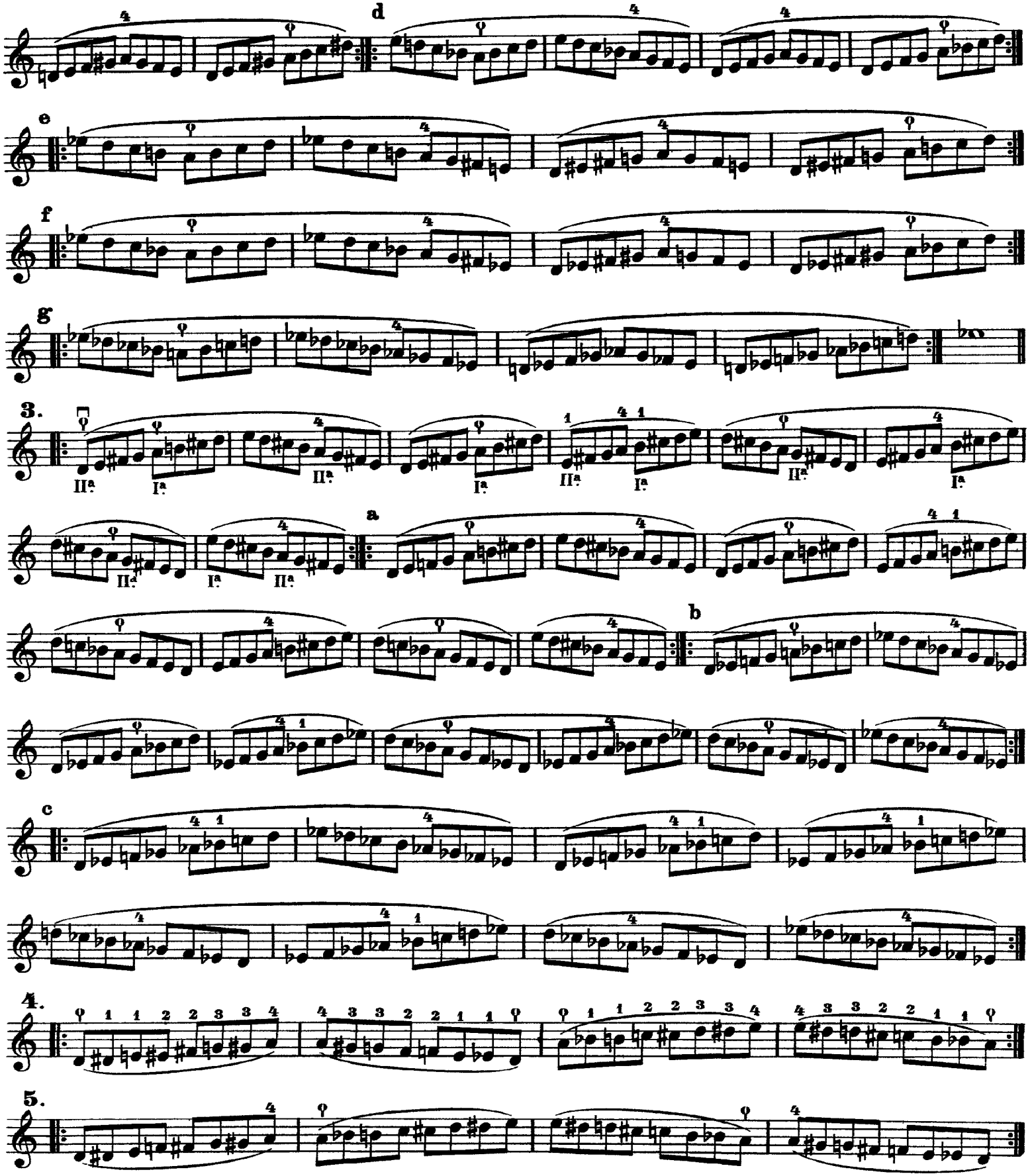
Die Übungen 6 bis 20 sind auch auf Ia und IIIa zu übertragen.
The exercises 6 - 20 are also to be played on the A string (Ia) and G string (IIIa)
Les exercices 6 à 20 seront aussi appliqués à Ia et IIIa.

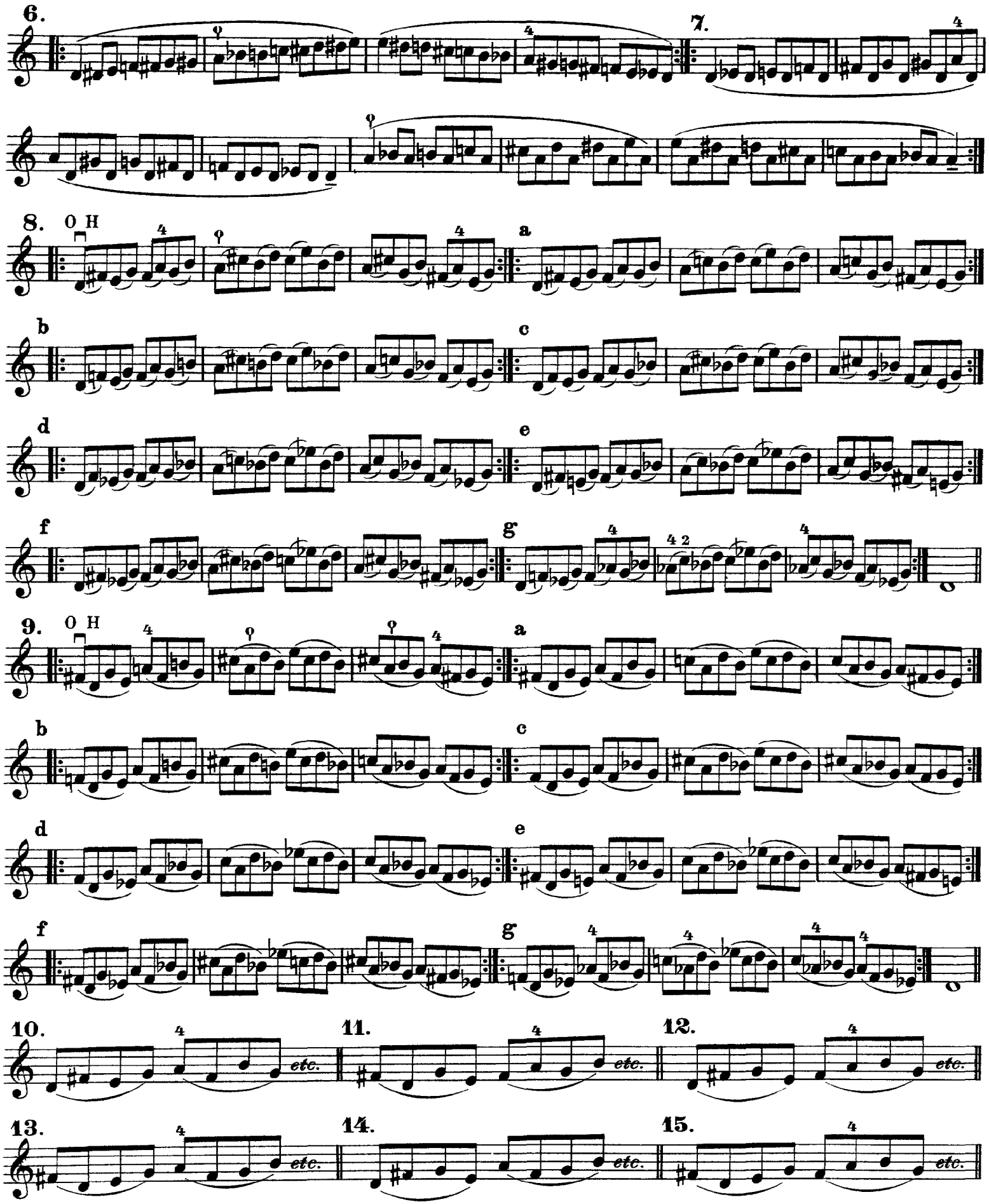
II.

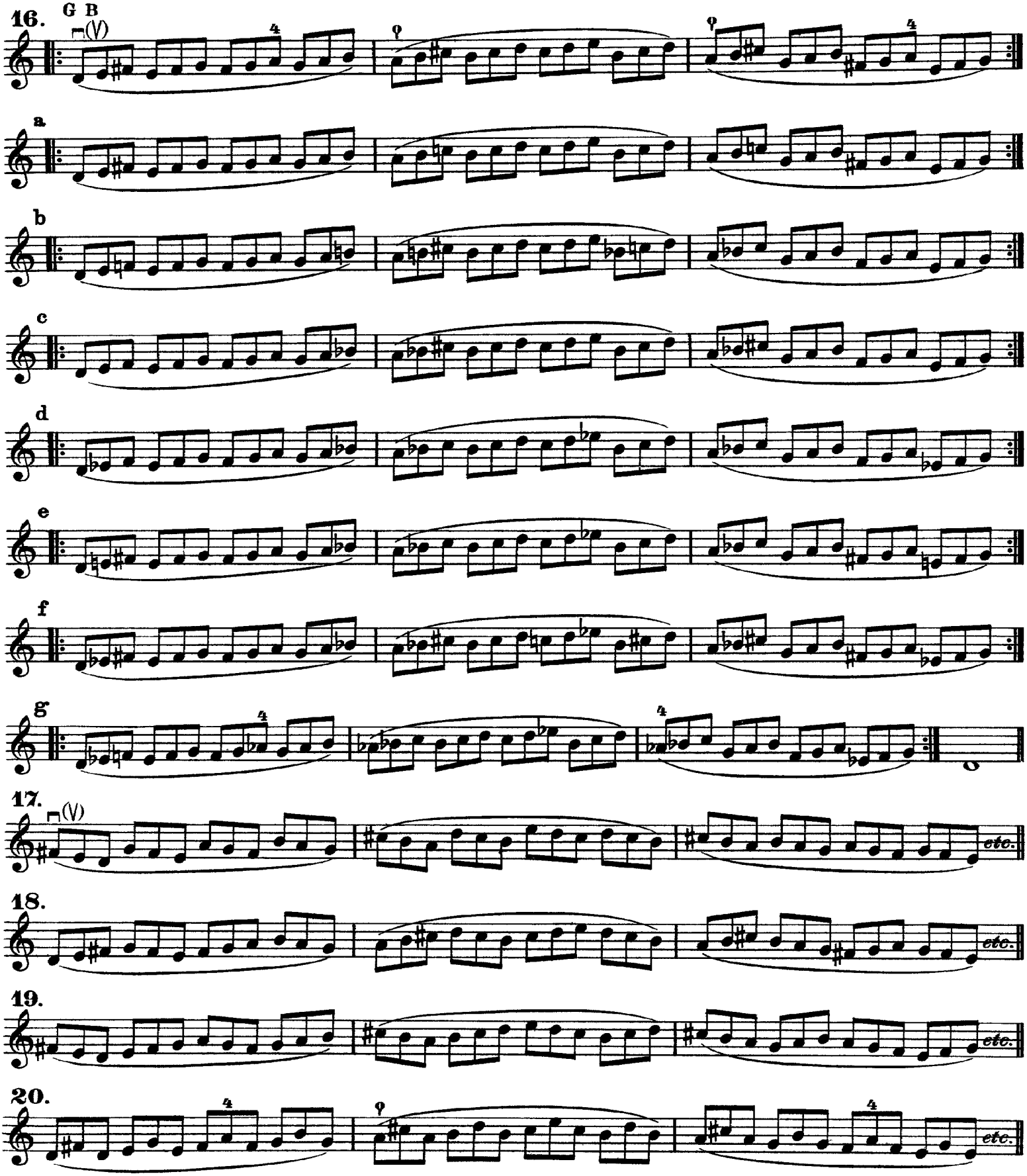
Übungen auf zwei Saiten

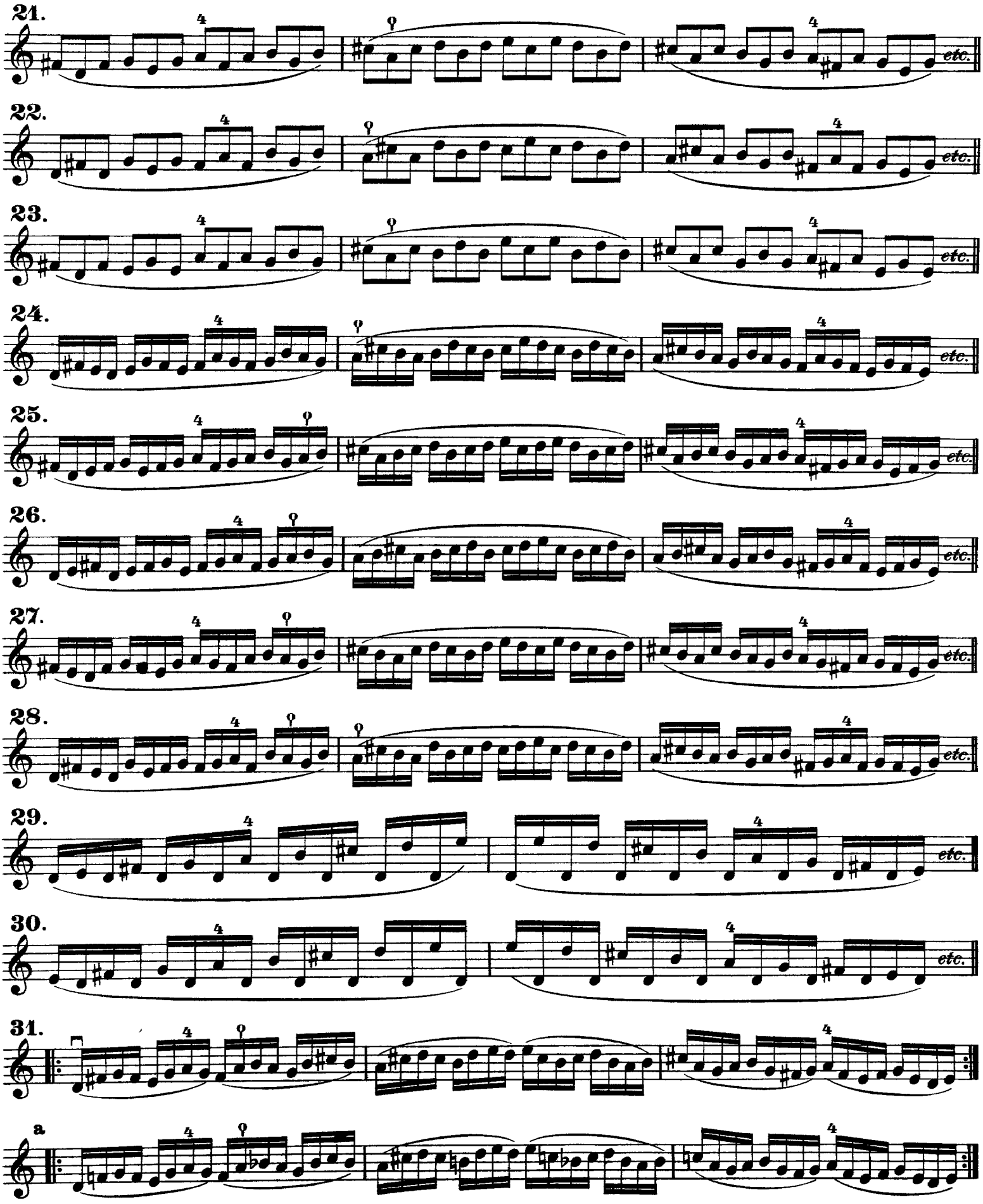
Exercises on two strings Exercices sur deux cordes

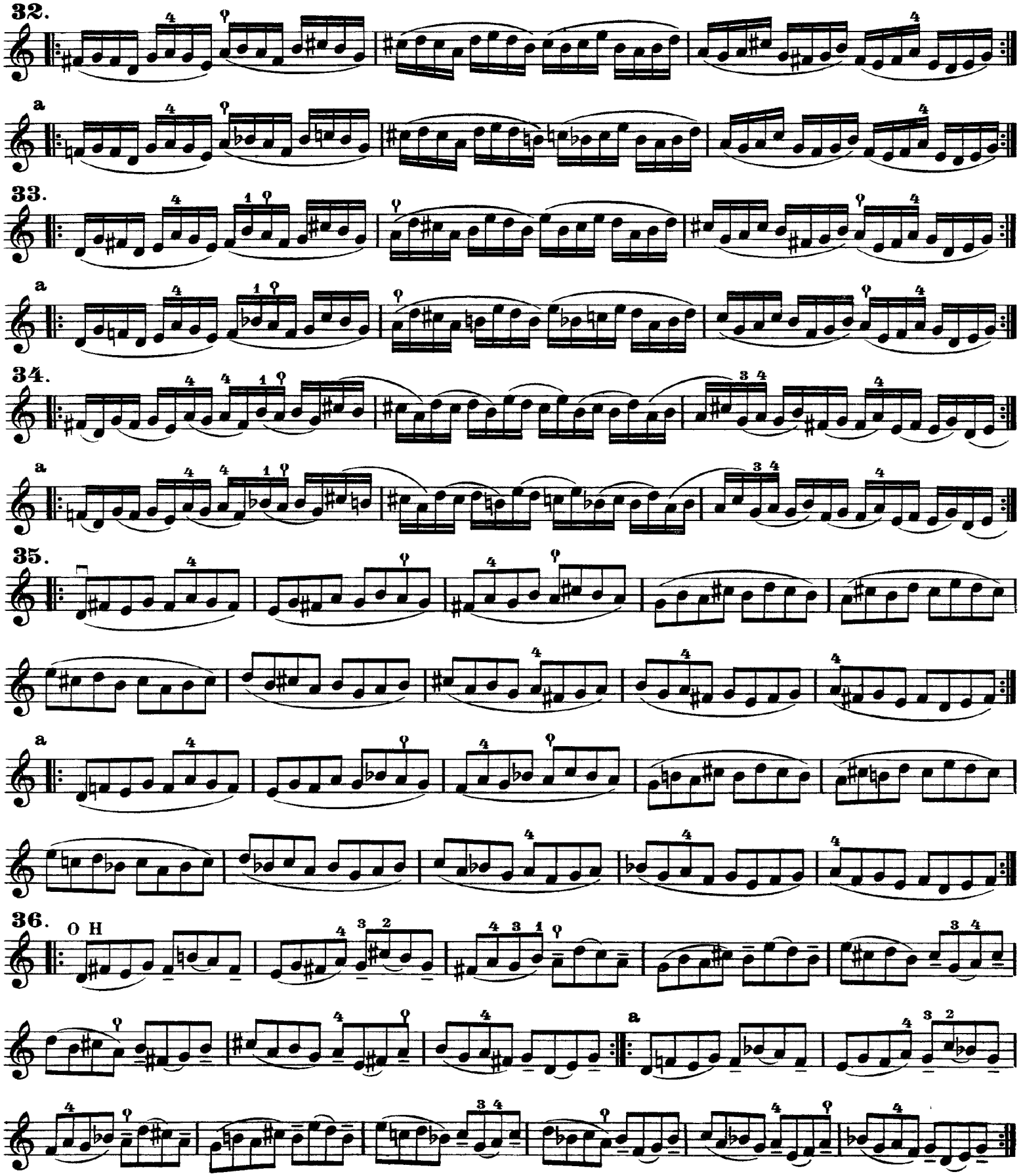


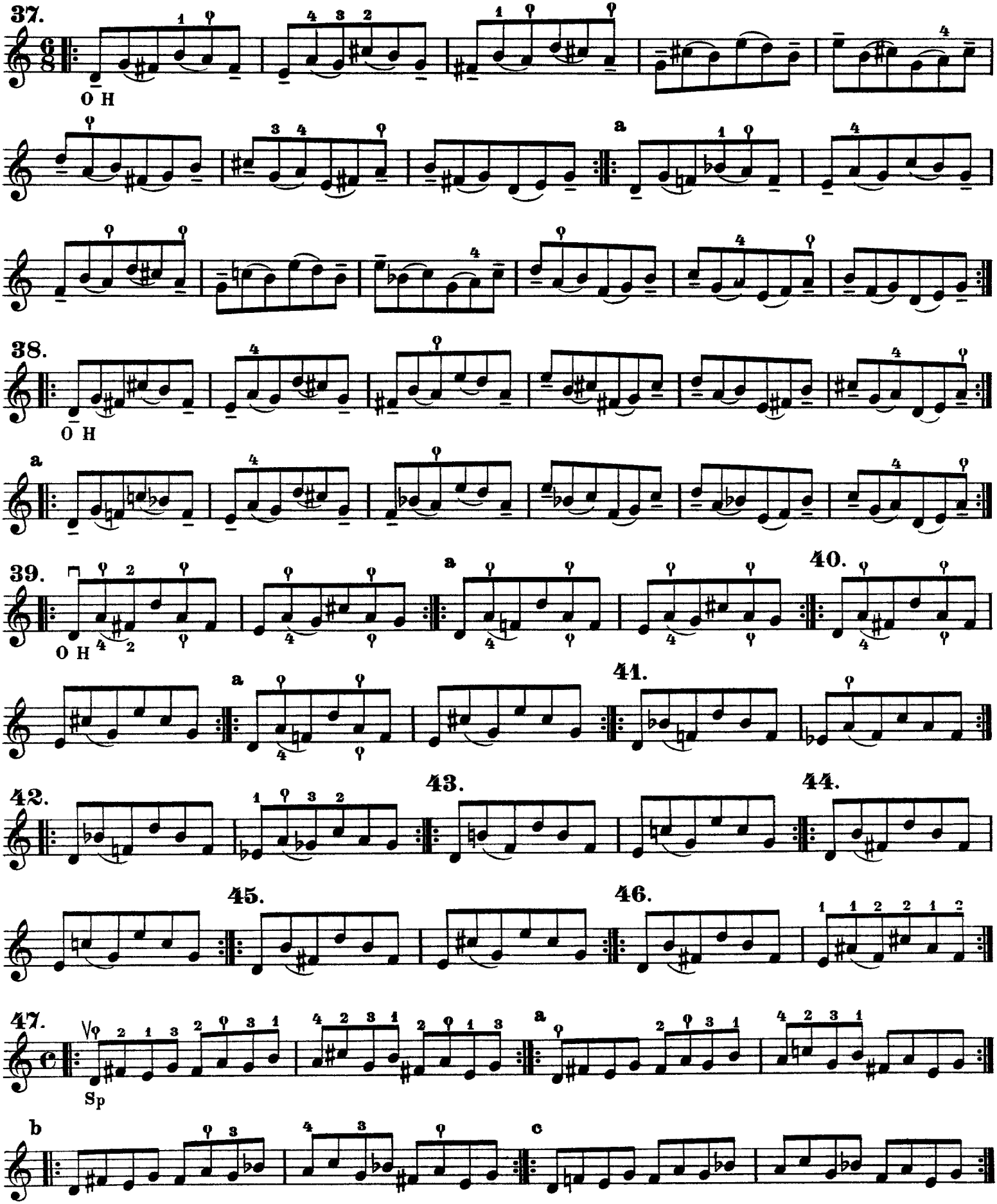

d
e
f
g
3.
IIª
Iª
a
b
c
4.
5.

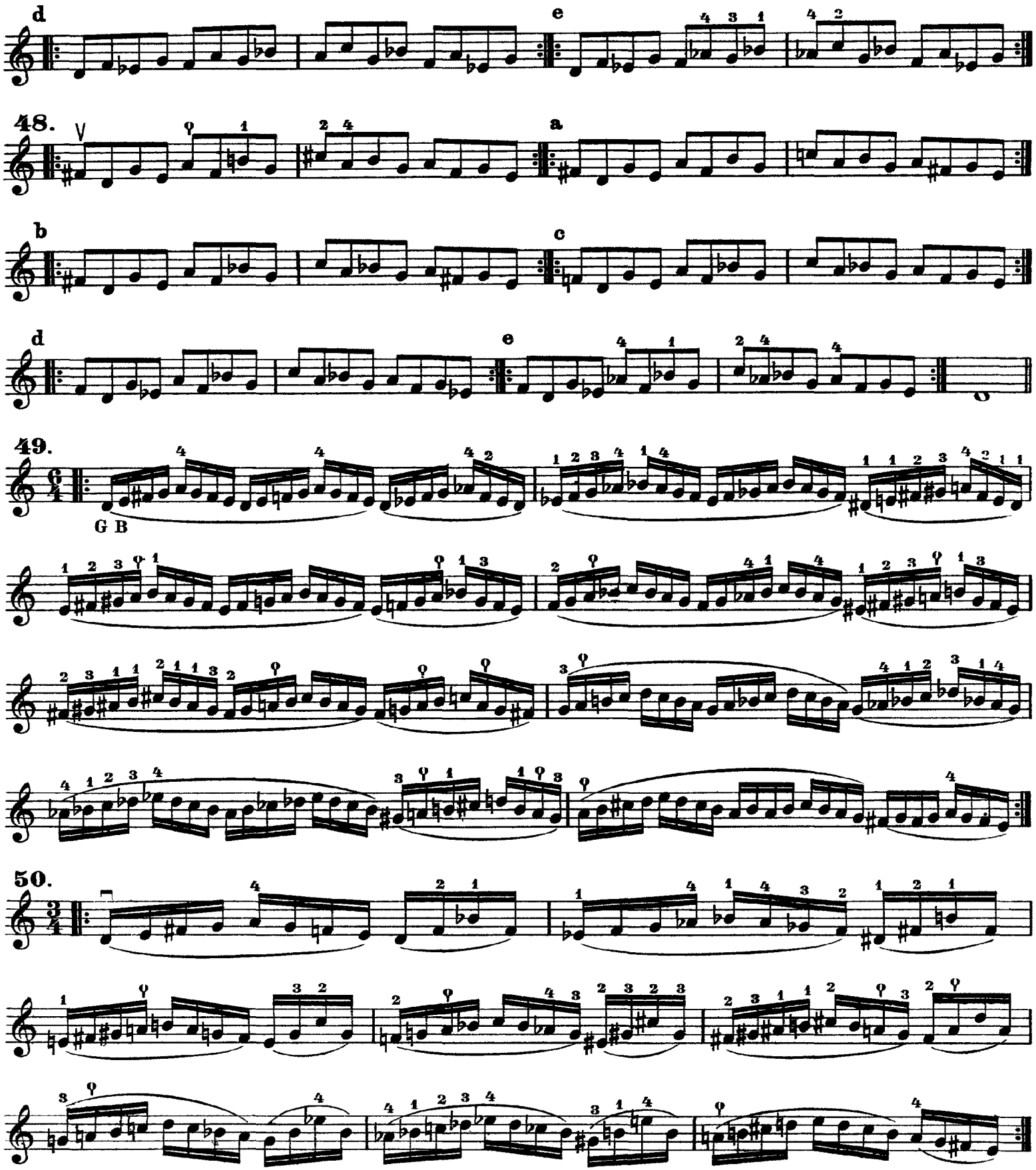

6.
7.
8.
O H
a
b
c
d
e
f
g
9.
O H
a
b
c
d
e
f
g
10.
etc.
11.
etc.
12.
etc.
13.
etc.
14.
etc.
15.
etc.

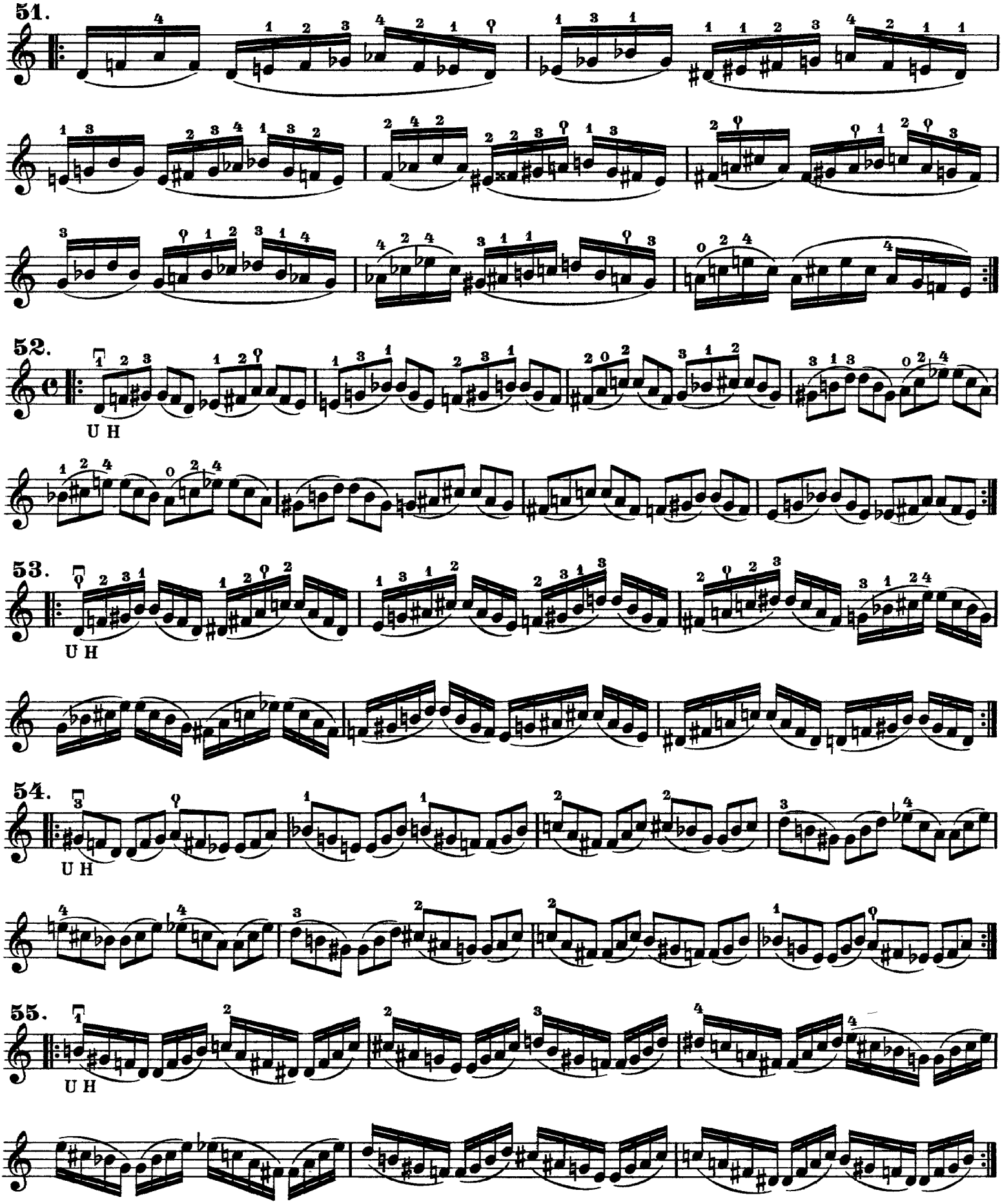

16.
G B
(V)
a
b
c
d
e
f
g
17.
(V)
etc.
18.
etc.
19.
etc.
20.
etc.

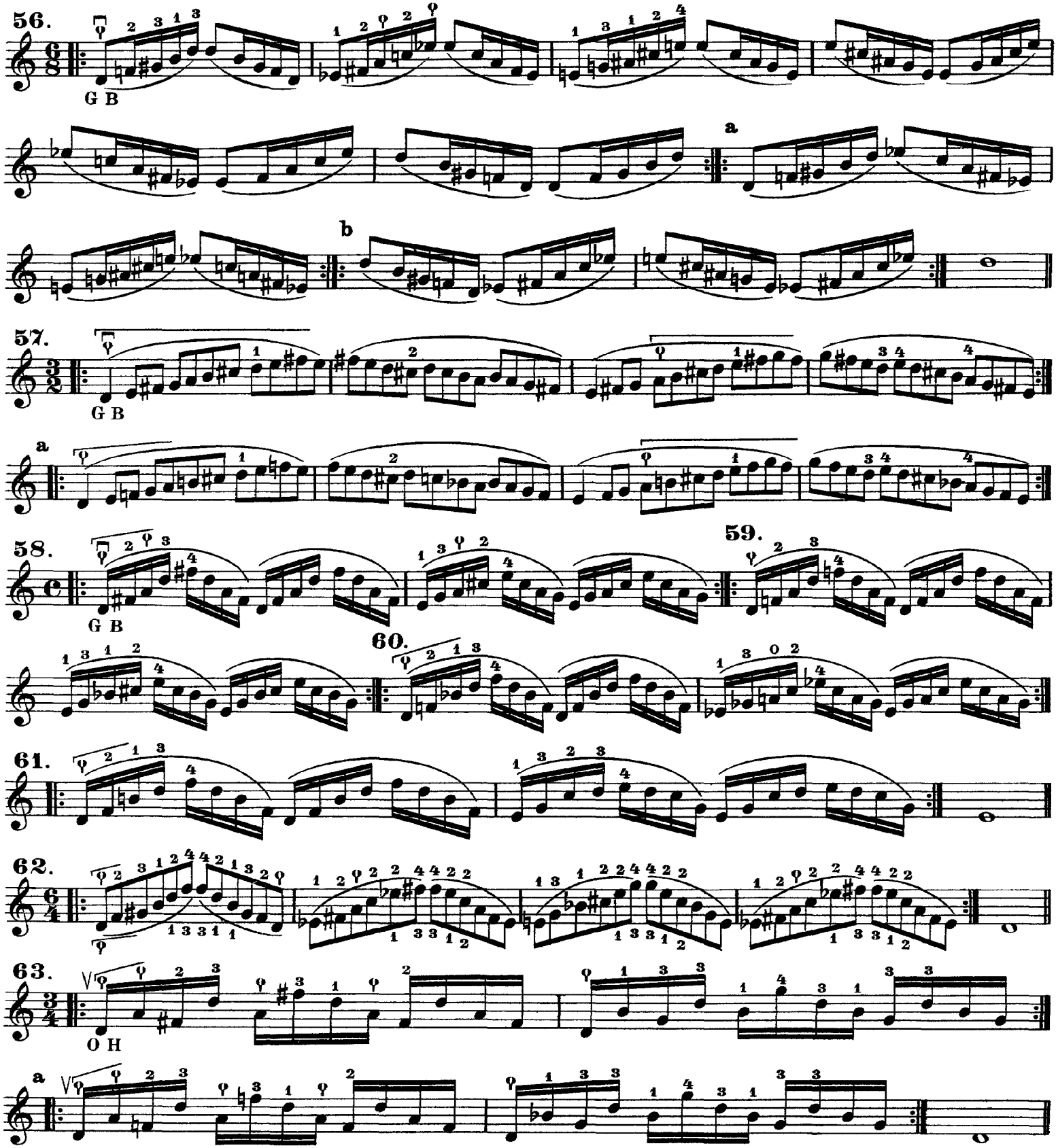

21.
22.
23.
24.
25.
26.
27.
28.
29.
30.
31.
a
etc.


32.
a
33.
a
34.
a
35.
a
36.
O H
a


37.
O H
a
38.
O H
a
39.
O H
a
40.
41.
42.
43.
44.
45.
46.
47.
Sp
a
b
c


d
e
48.
a
b
c
d
e
49.
G B
50.


51.
52.
U H
53.
U H
54.
U H
55.
U H

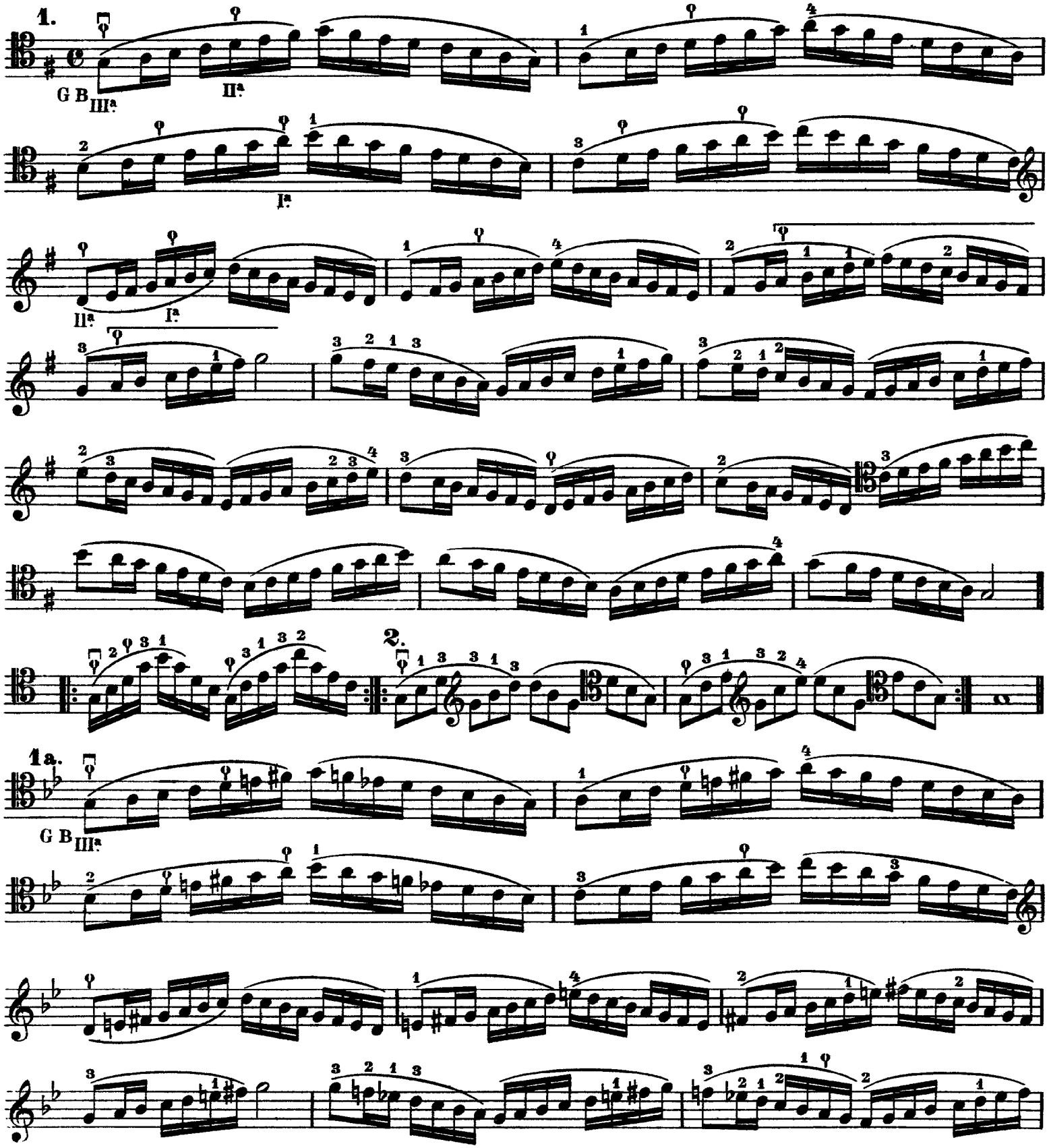


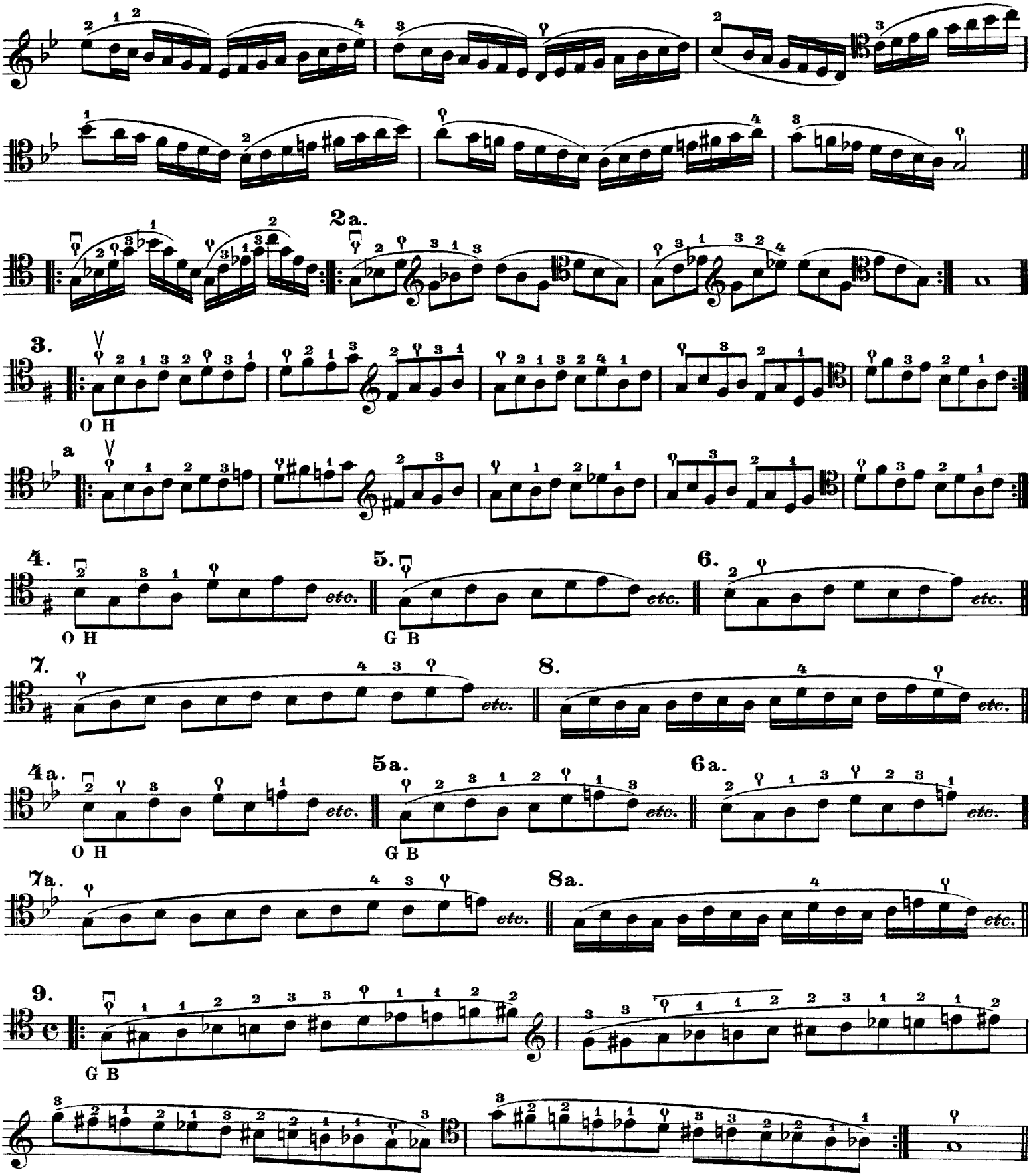
Die Übungen 1 bis 36 sind auch auf III.ª und II.ª zu übertragen.
The exercises 1 - 36 are also to be played on the G string (III.ª) and D string (II.ª)
Les exercices 1 à 36 seront aussi appliqués à III.ª et II.ª

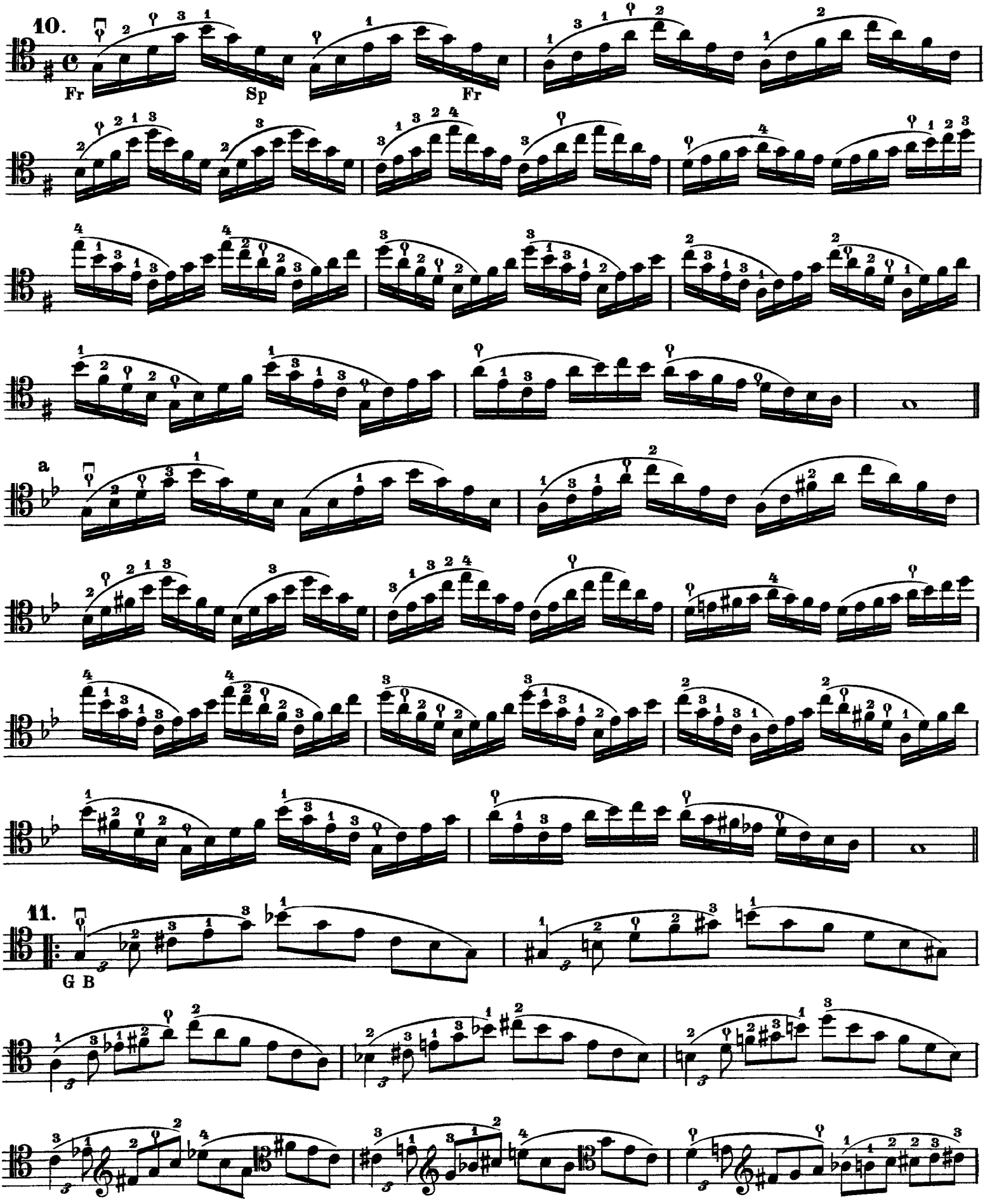
III.

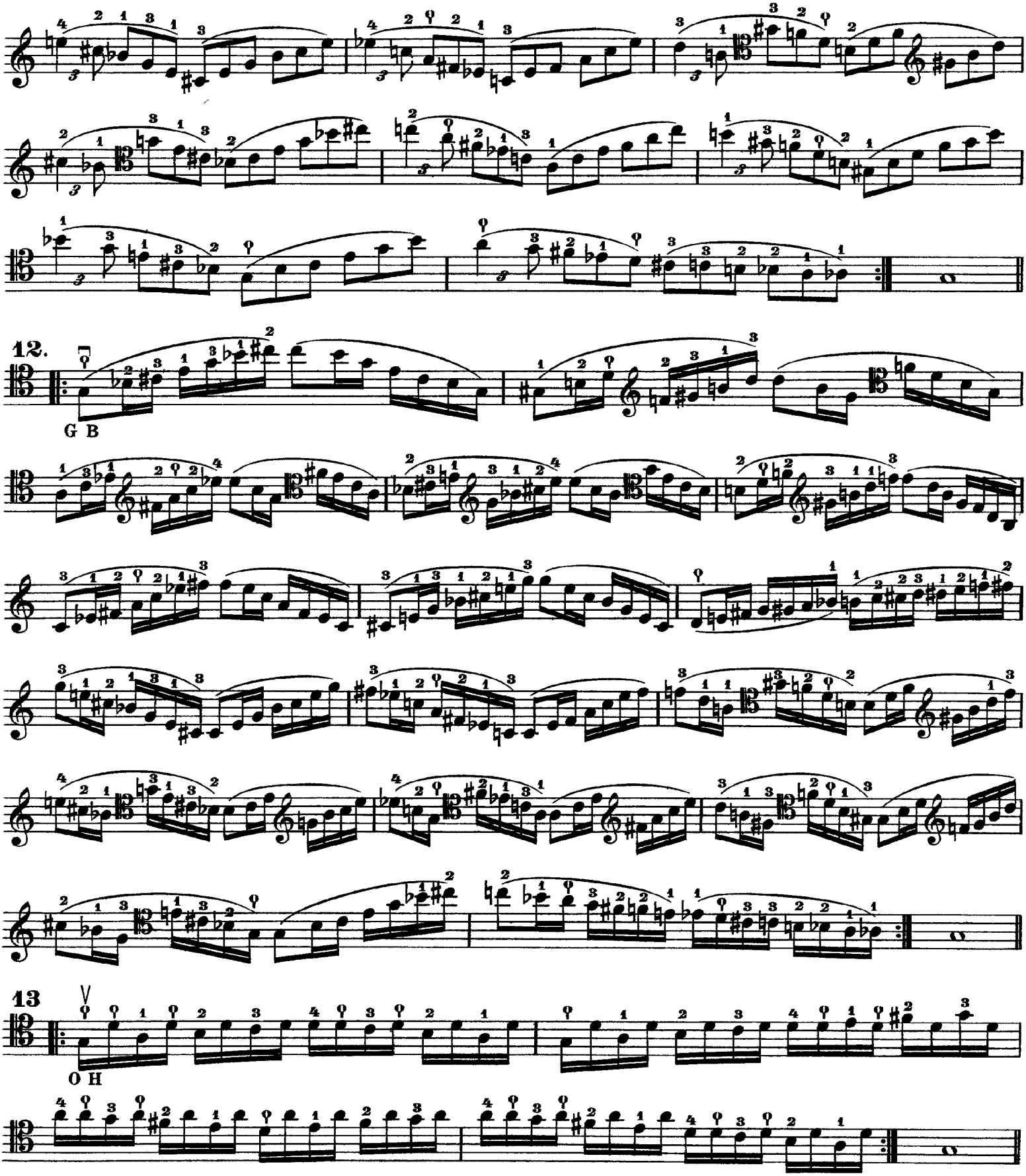
Übungen auf drei Saiten

Exercises on three strings Exercices sur trois cordes




2a.
3.
O H
a
4.
O H
5.
G B
6.
etc.
7.
8.
4a.
O H
5a.
G B
6a.
7a.
8a.
9.
G B

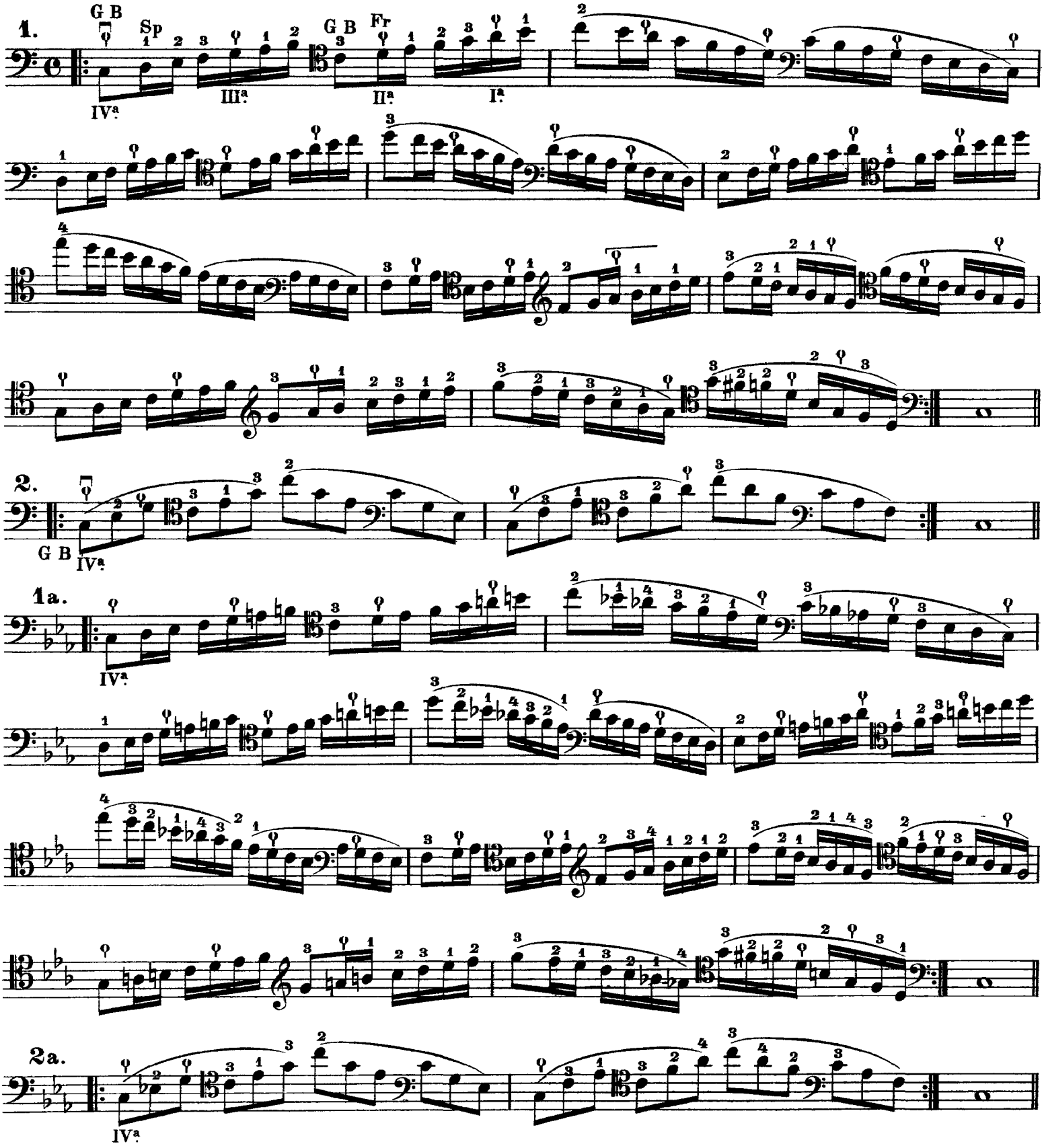

10.
Fr
Sp
Fr
a
11.
G B

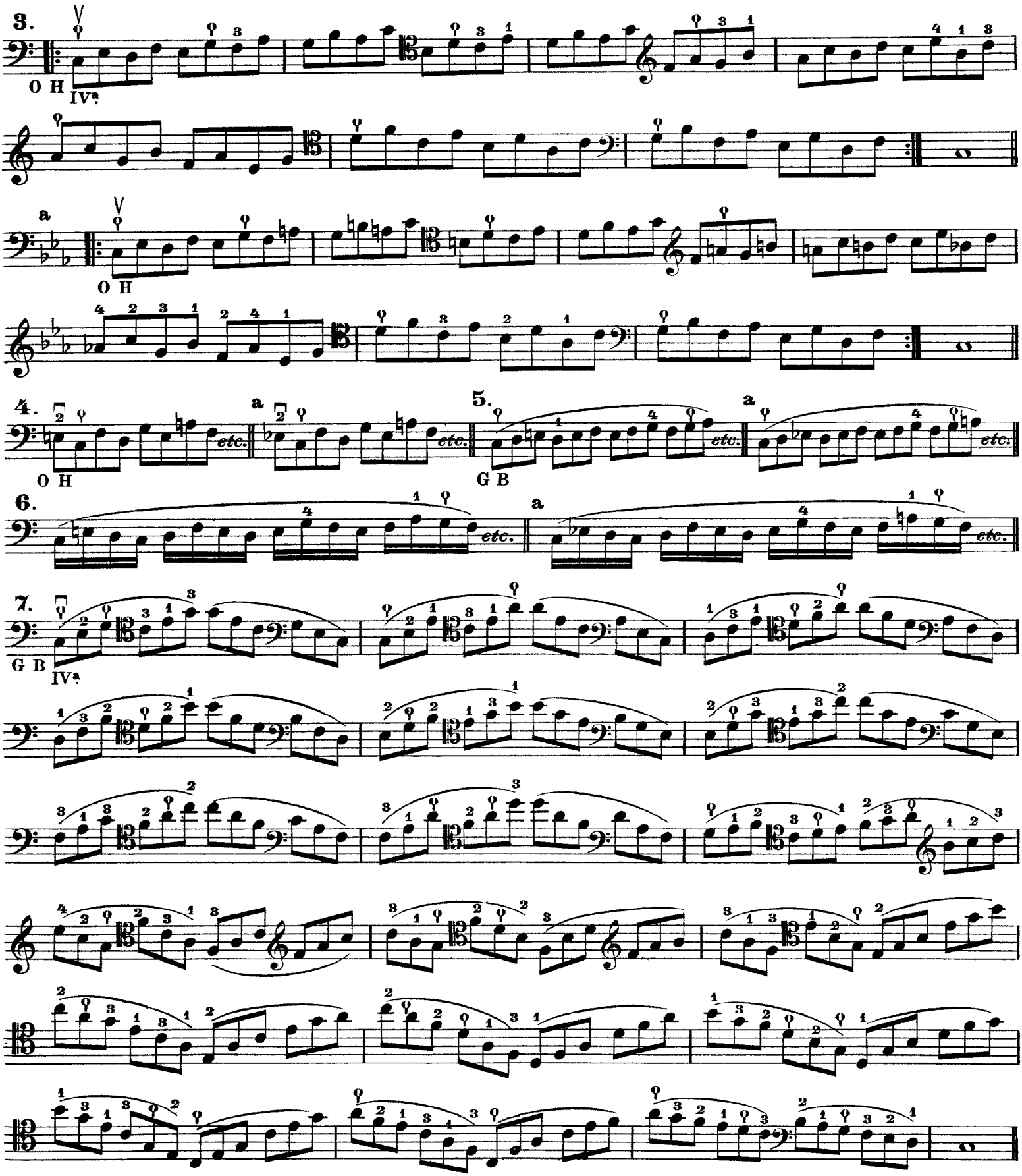

12.
G B
13
O H

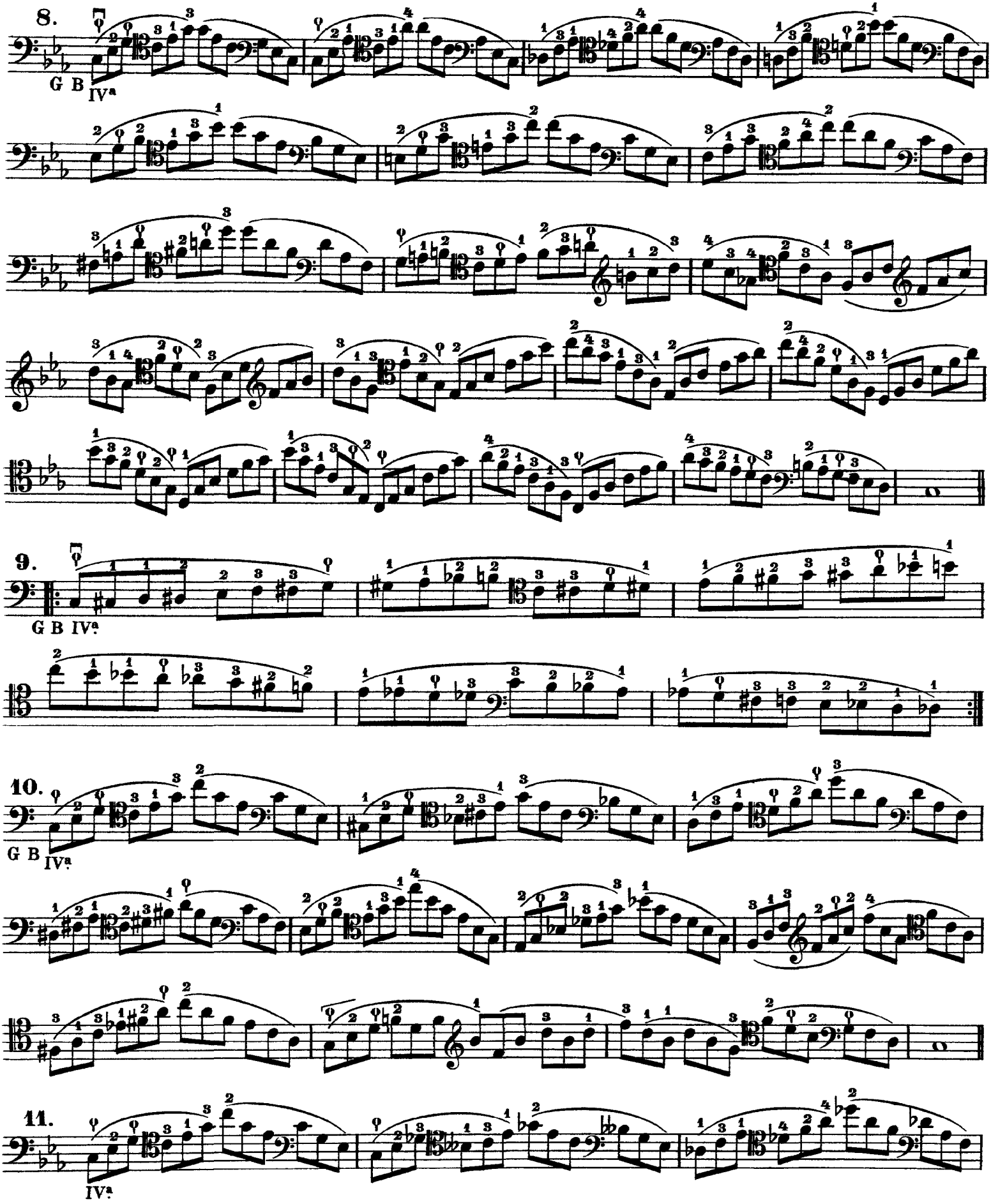
IV.

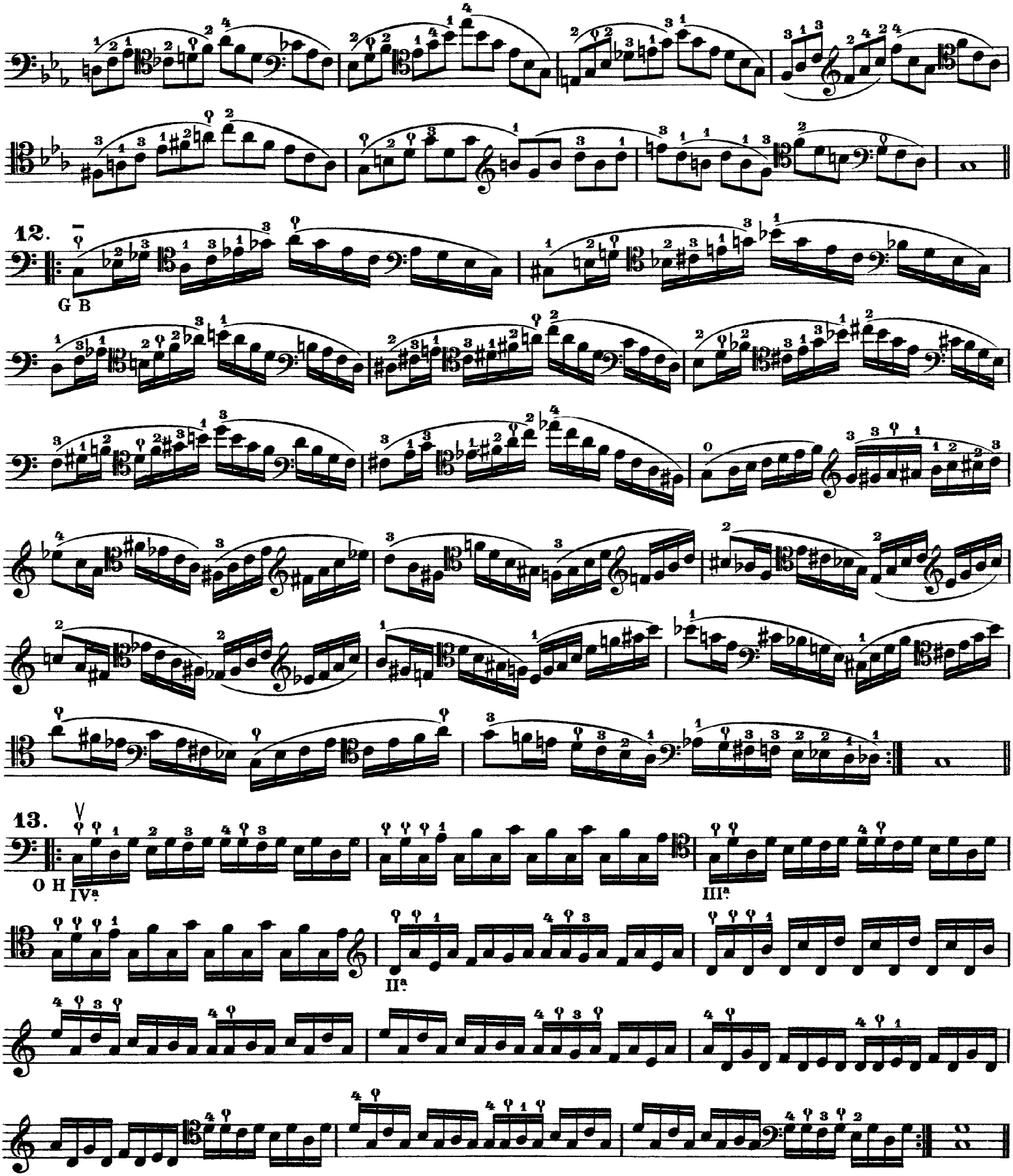
Übungen auf vier Saiten

Exercises on four strings Exercices sur quatre cordes




3.
O H
IVª
a
O H
4.
O H
a
5.
G B
a
6.
a
7.
G B
IVª

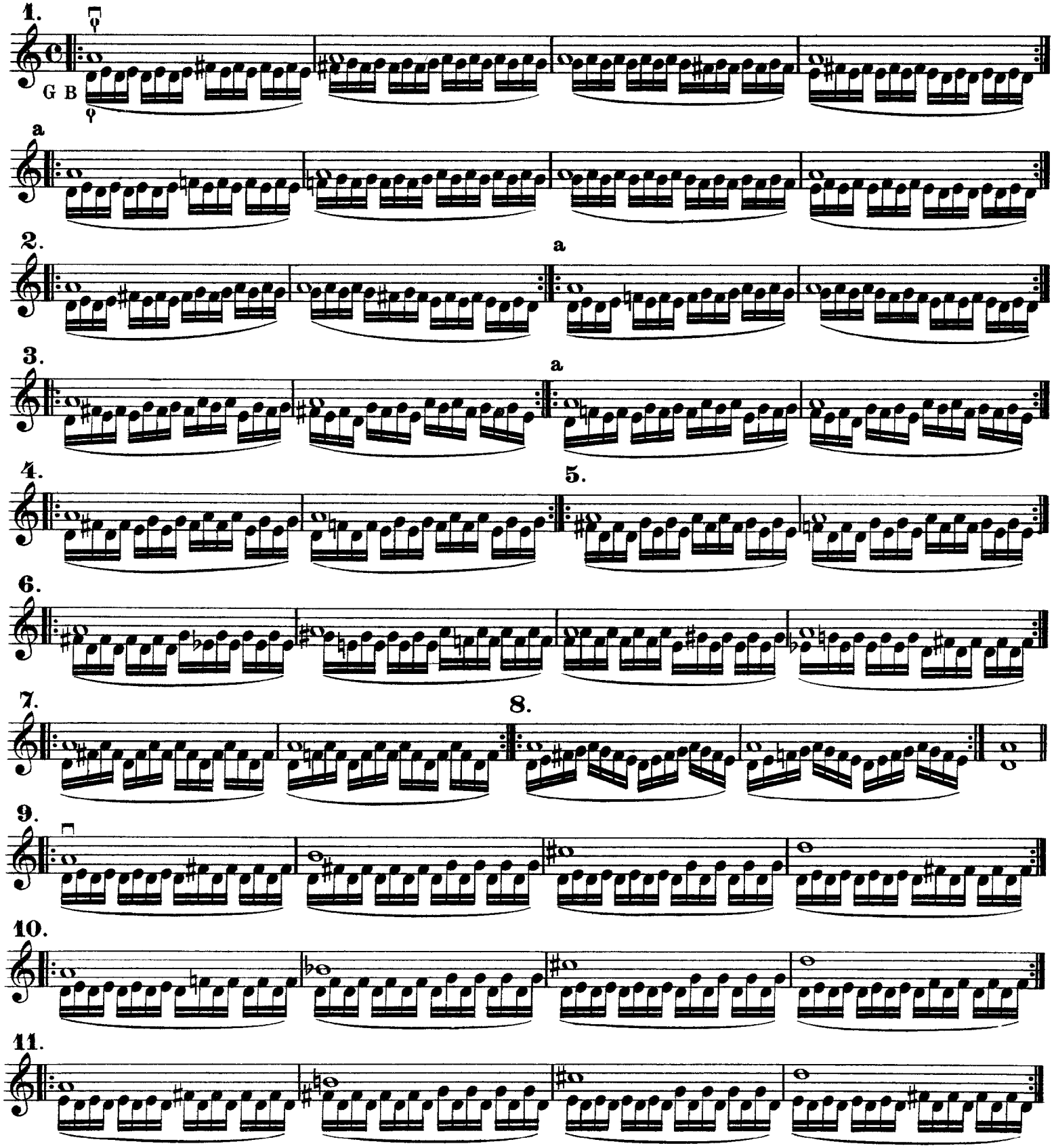

8.
G B IVª
9.
G B IVª
10.
G B IVª
11.
IVª

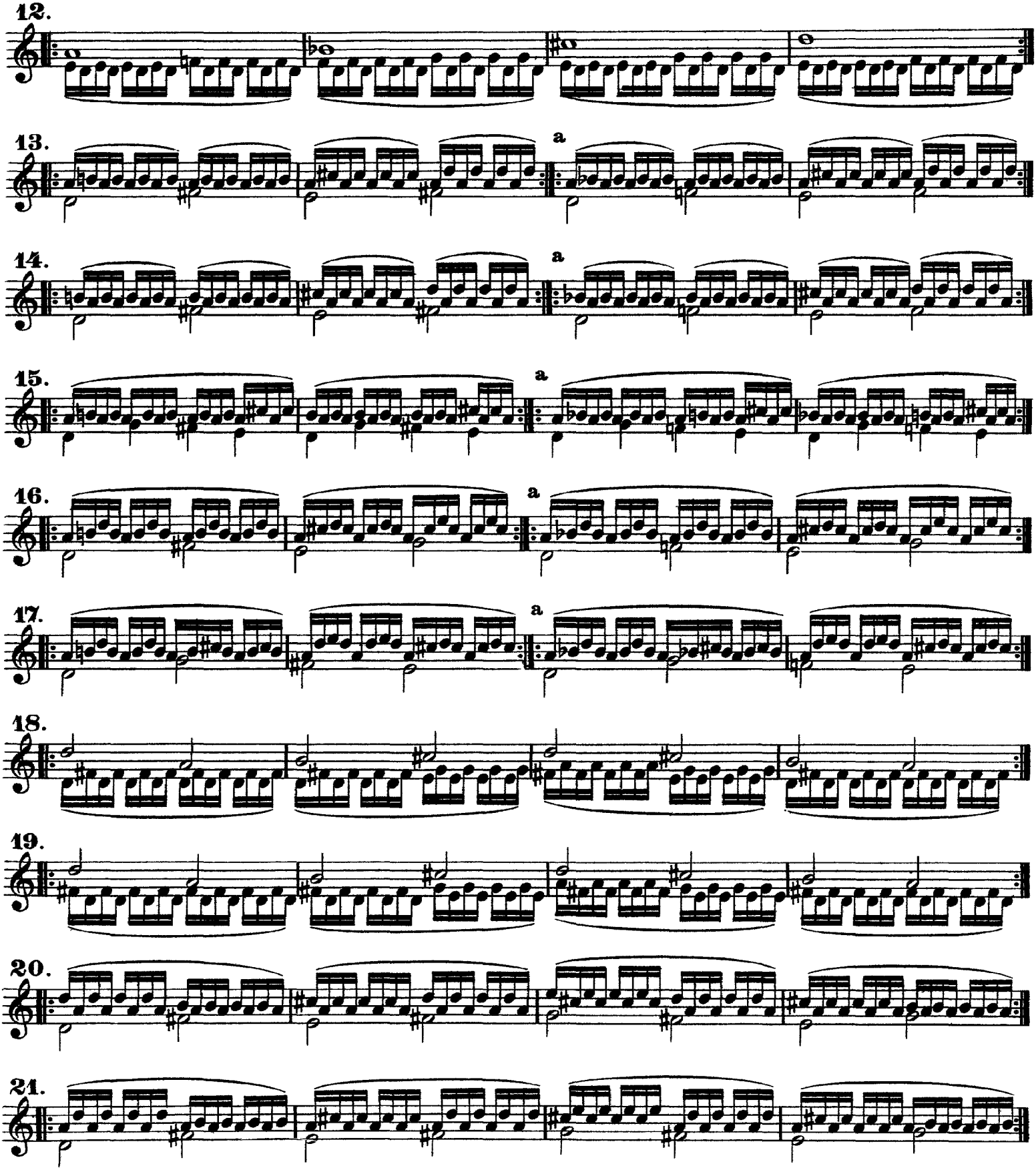

12.
G B
13.
O H
IV.ª
III.ª
II.ª

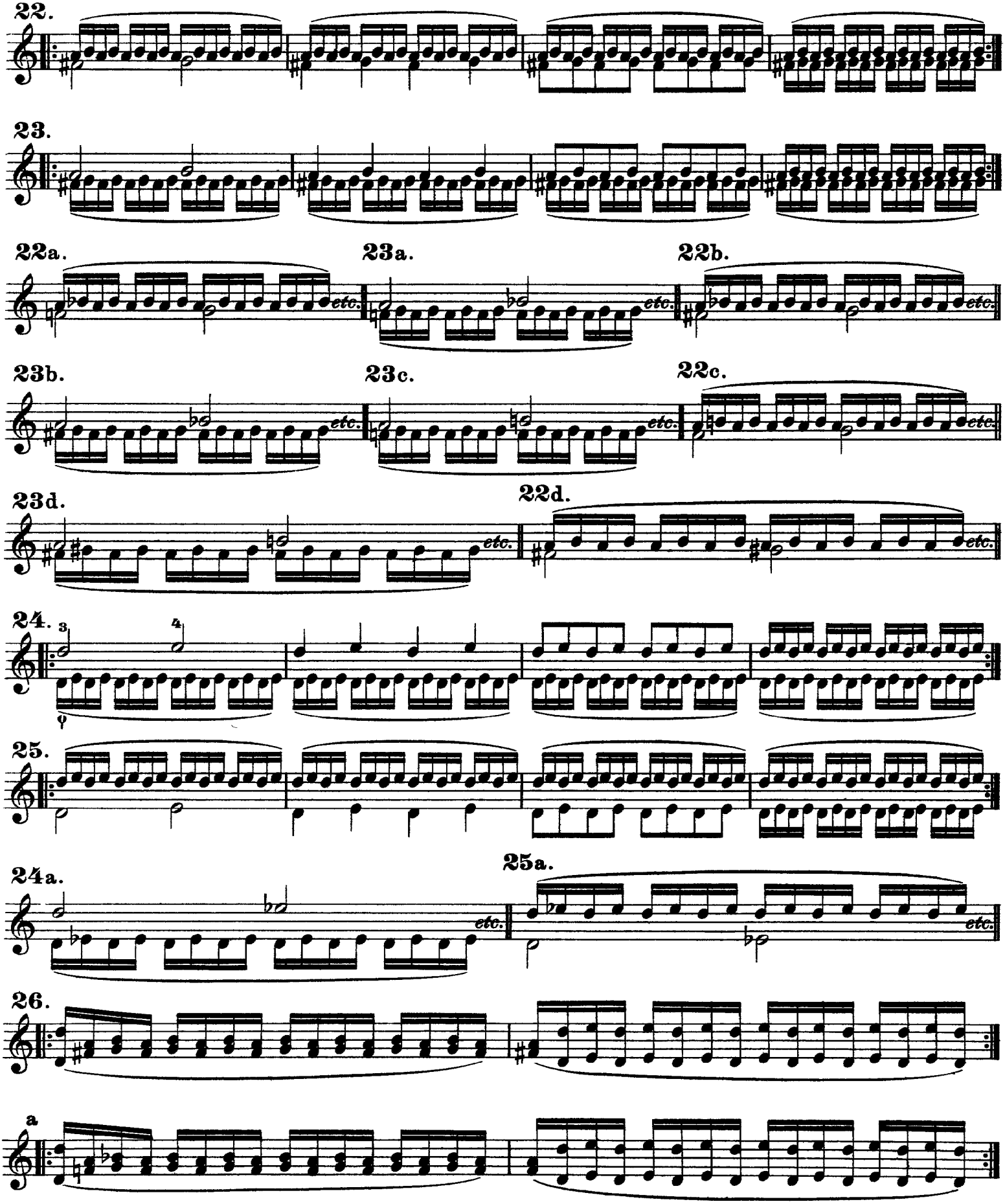
V.

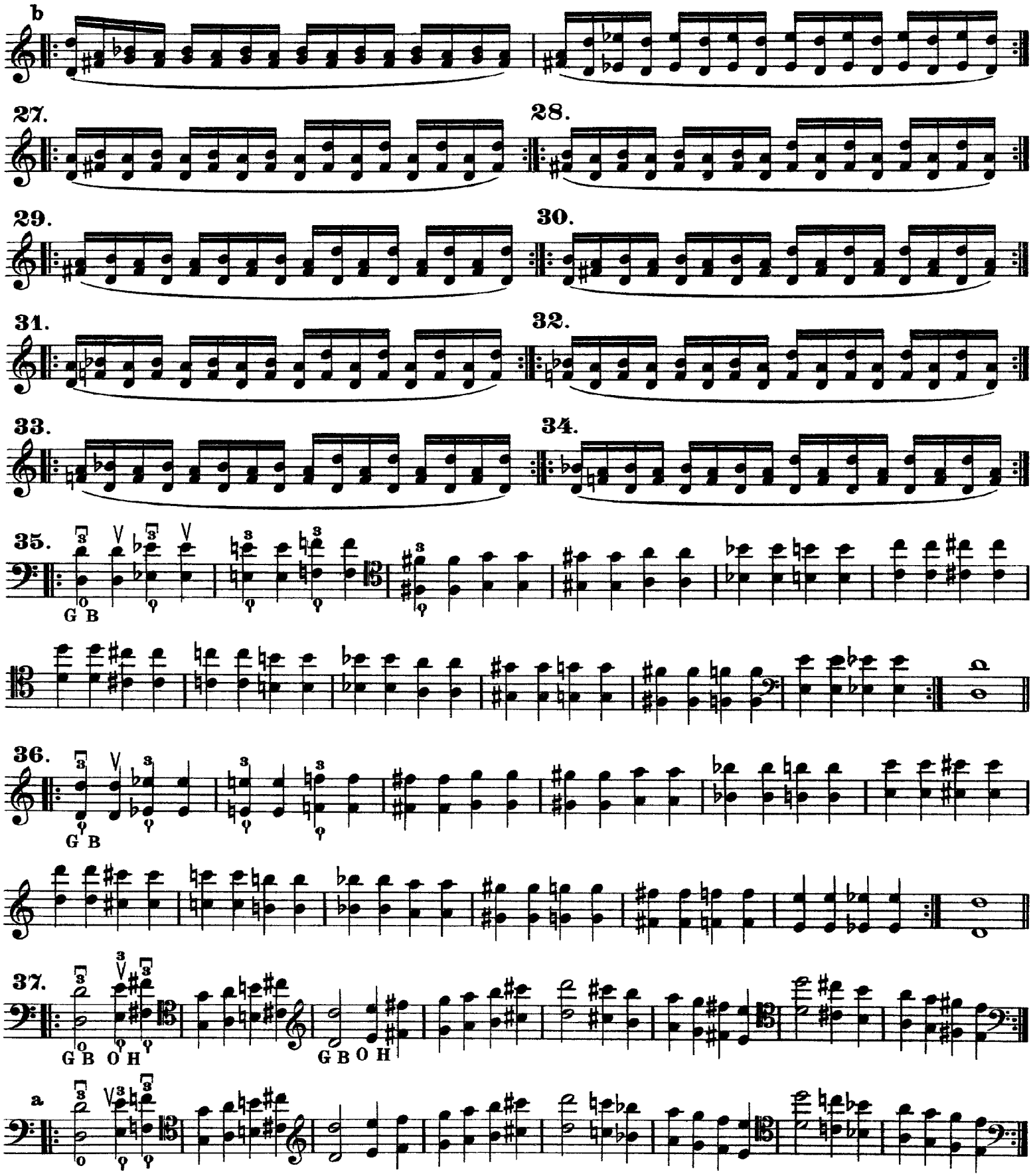
Gemischte Übungen, Doppelgriffe

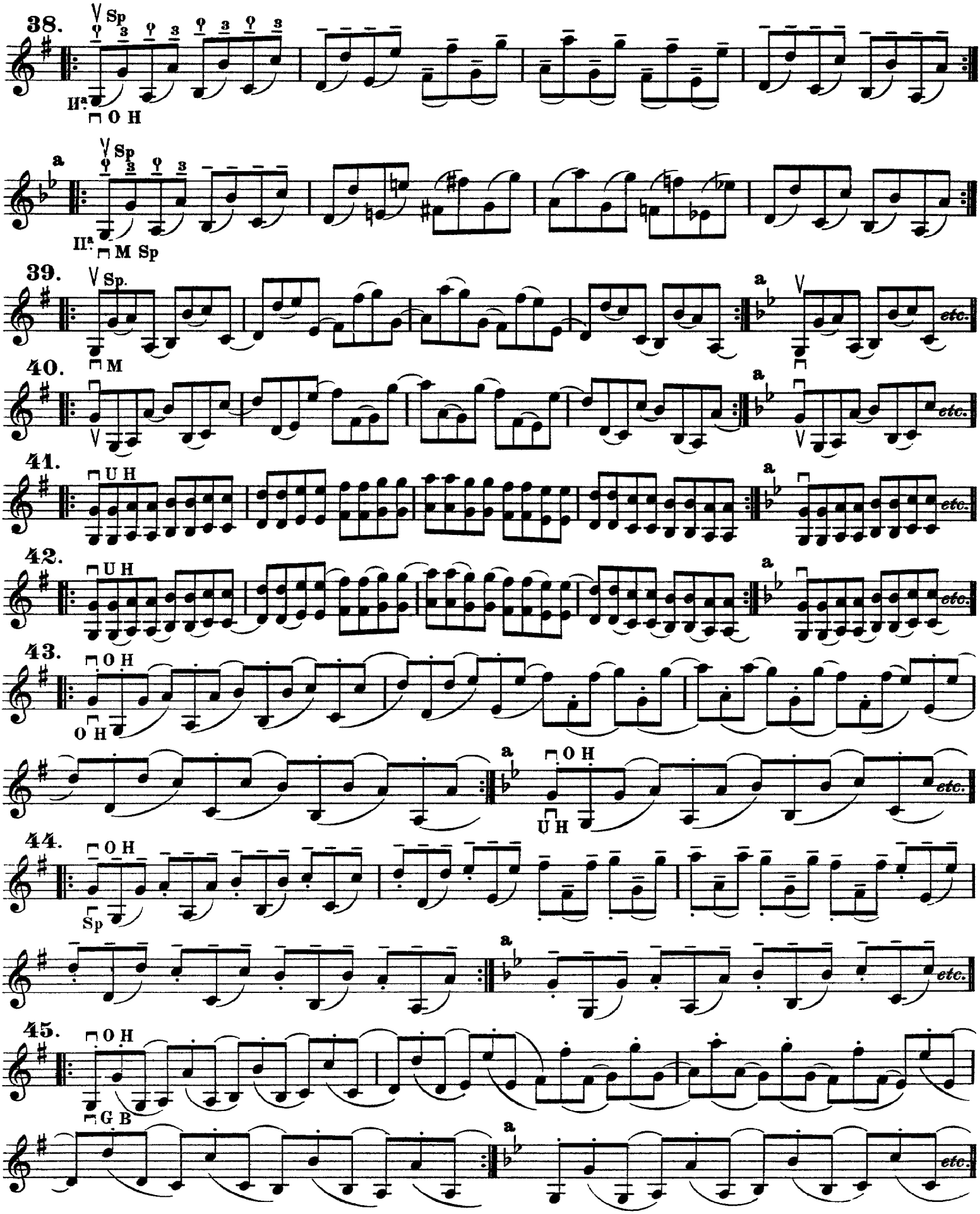
Mixed exercises, Double stopping Récapitulation, Doubles cordes

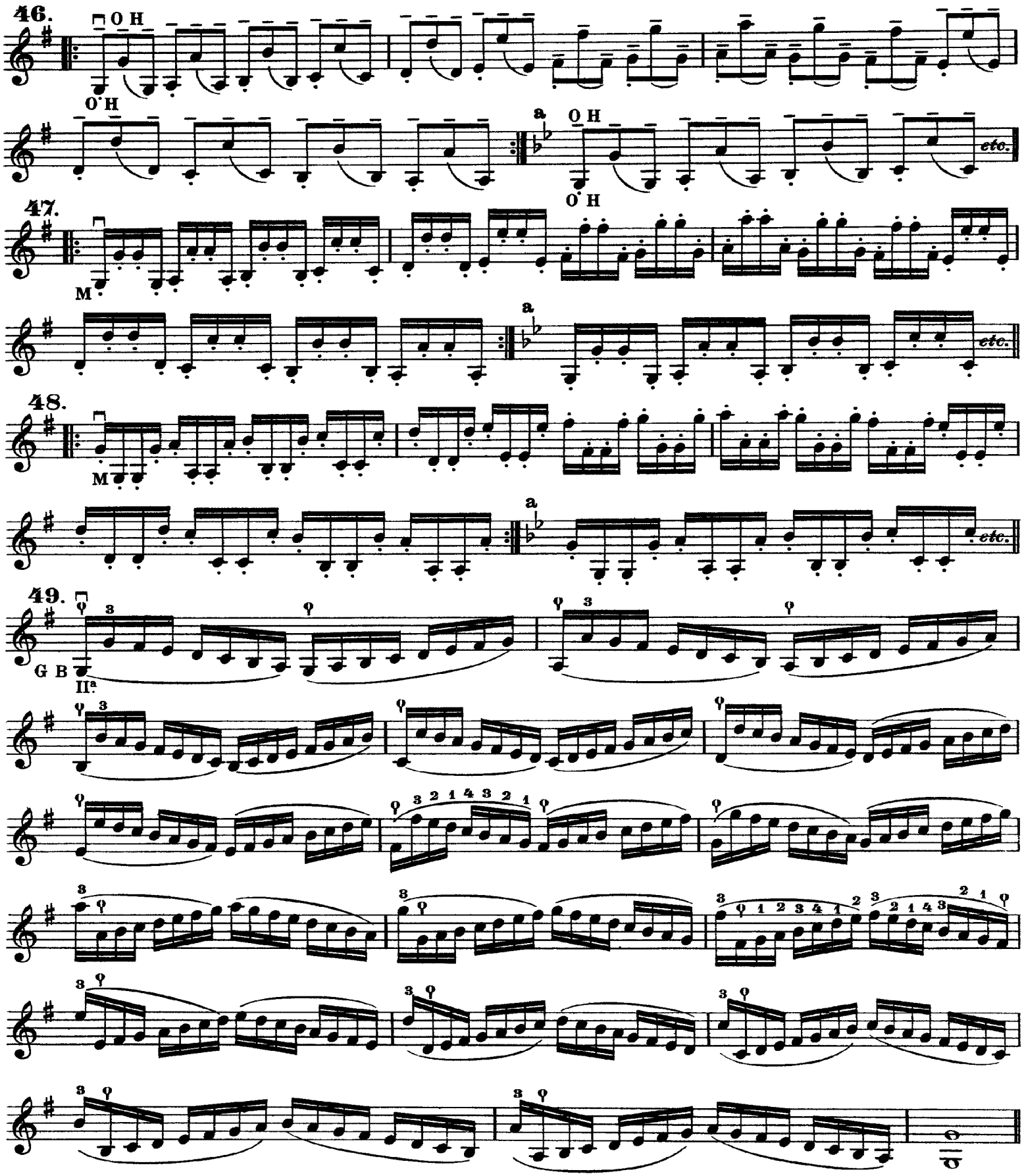


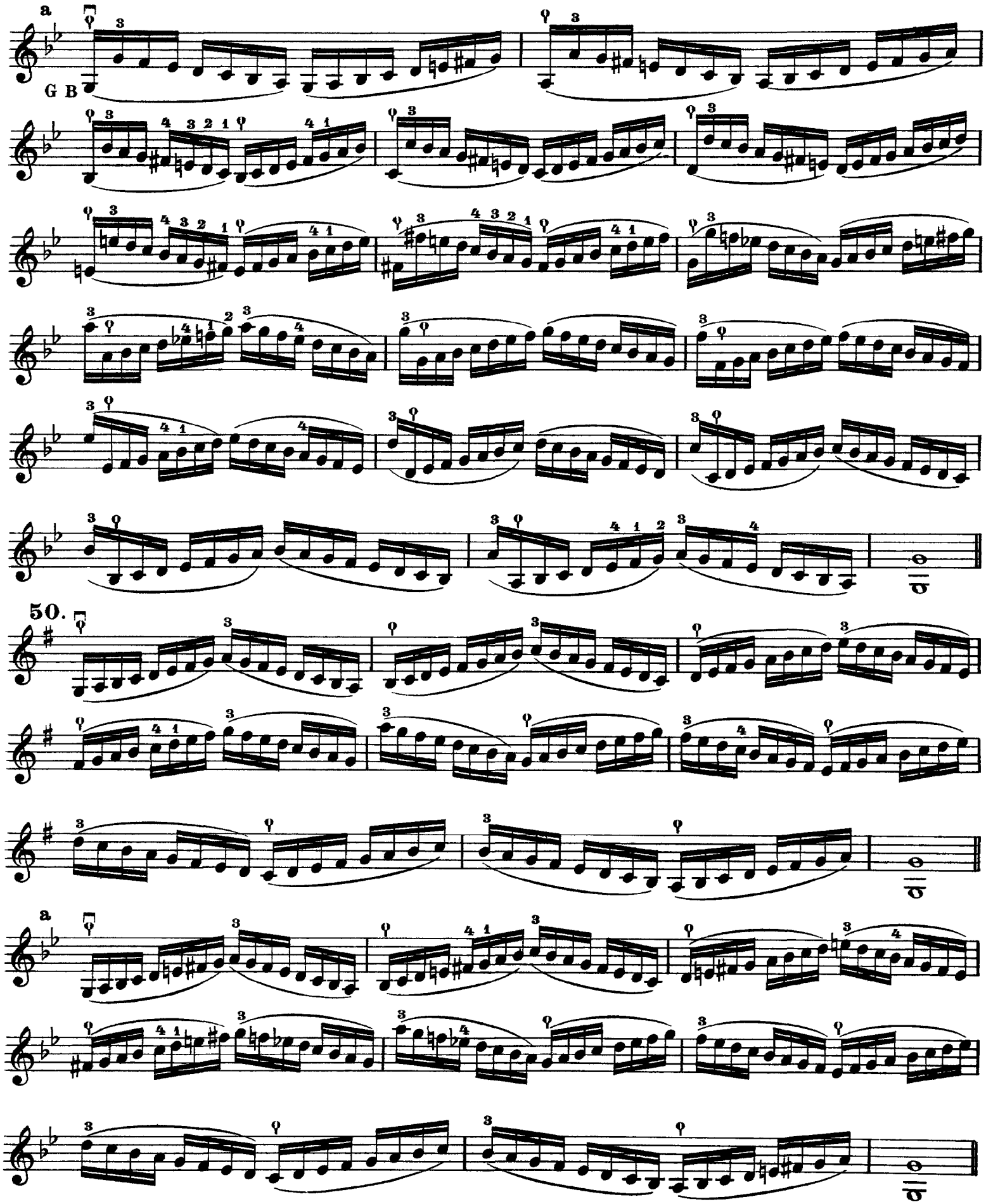

12.
13.
a
14.
a
15.
a
16.
a
17.
a
18.
19.
20.
21.

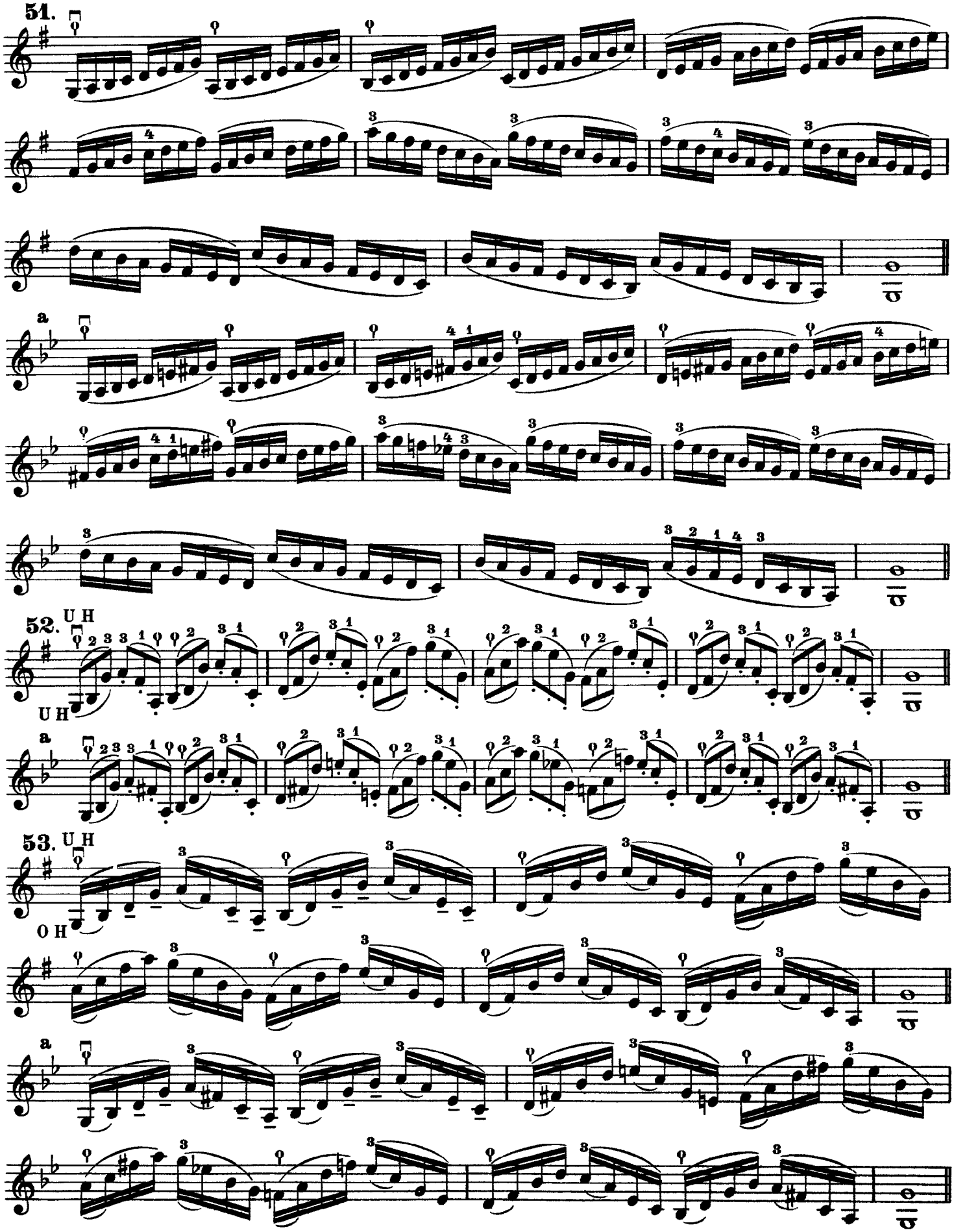

22.
23.
22a.
23a.
22b.
23b.
23c.
22c.
23d.
22d.
24.
25.
24a.
25a.
26.
a

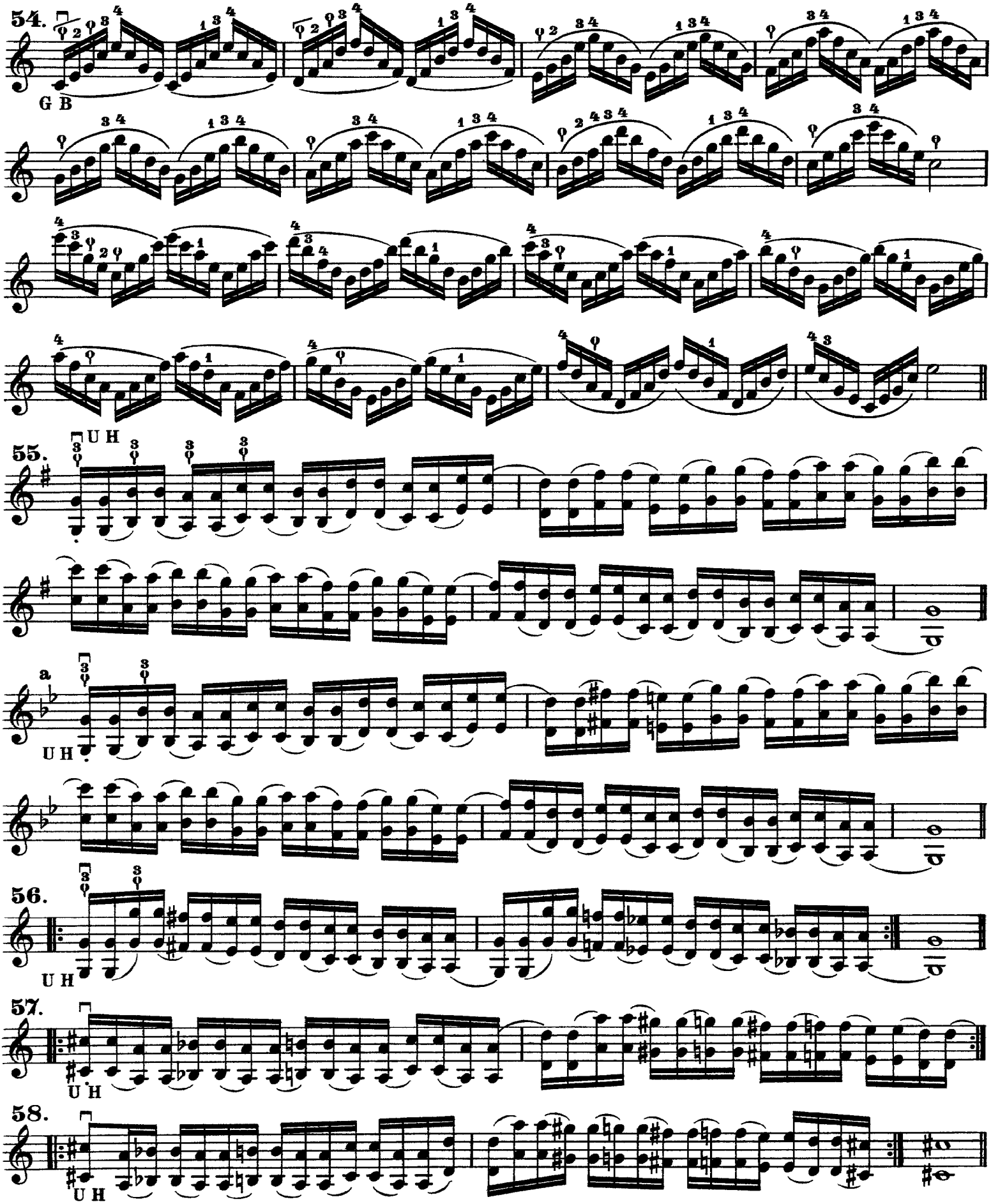

b
27.
28.
29.
30.
31.
32.
33.
34.
35.
G B
36.
G B
37.
G B O H
G B O H
a

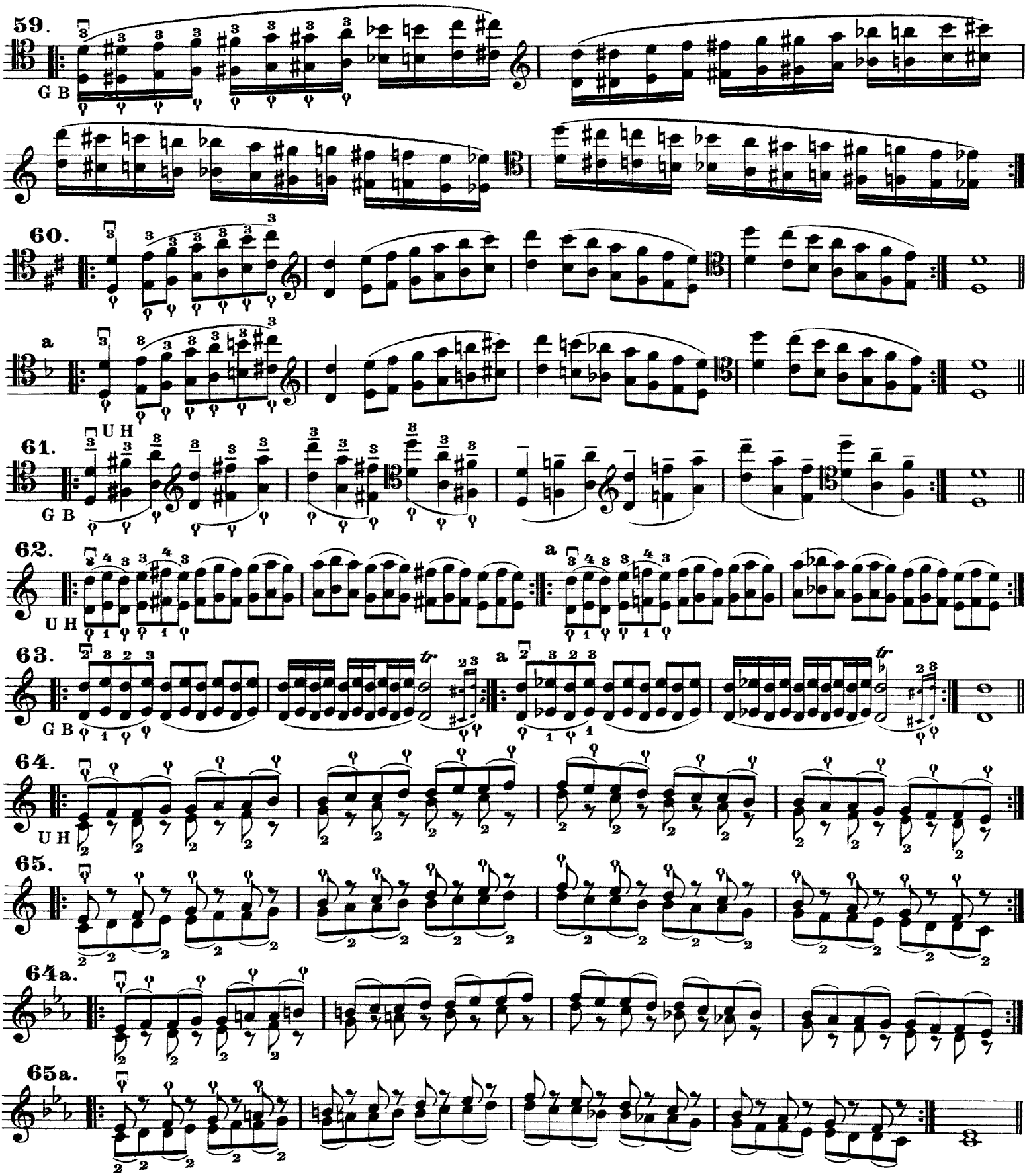

38.
Sp
IIa
O H
a
Sp
IIa
M Sp
39.
Sp.
M
a
etc.
40.
M
V
a
etc.
41.
U H
a
etc.
42.
U H
a
etc.
43.
O H
O H
a
O H
U H
etc.
44.
O H
Sp
a
etc.
45.
O H
G B
a
etc.

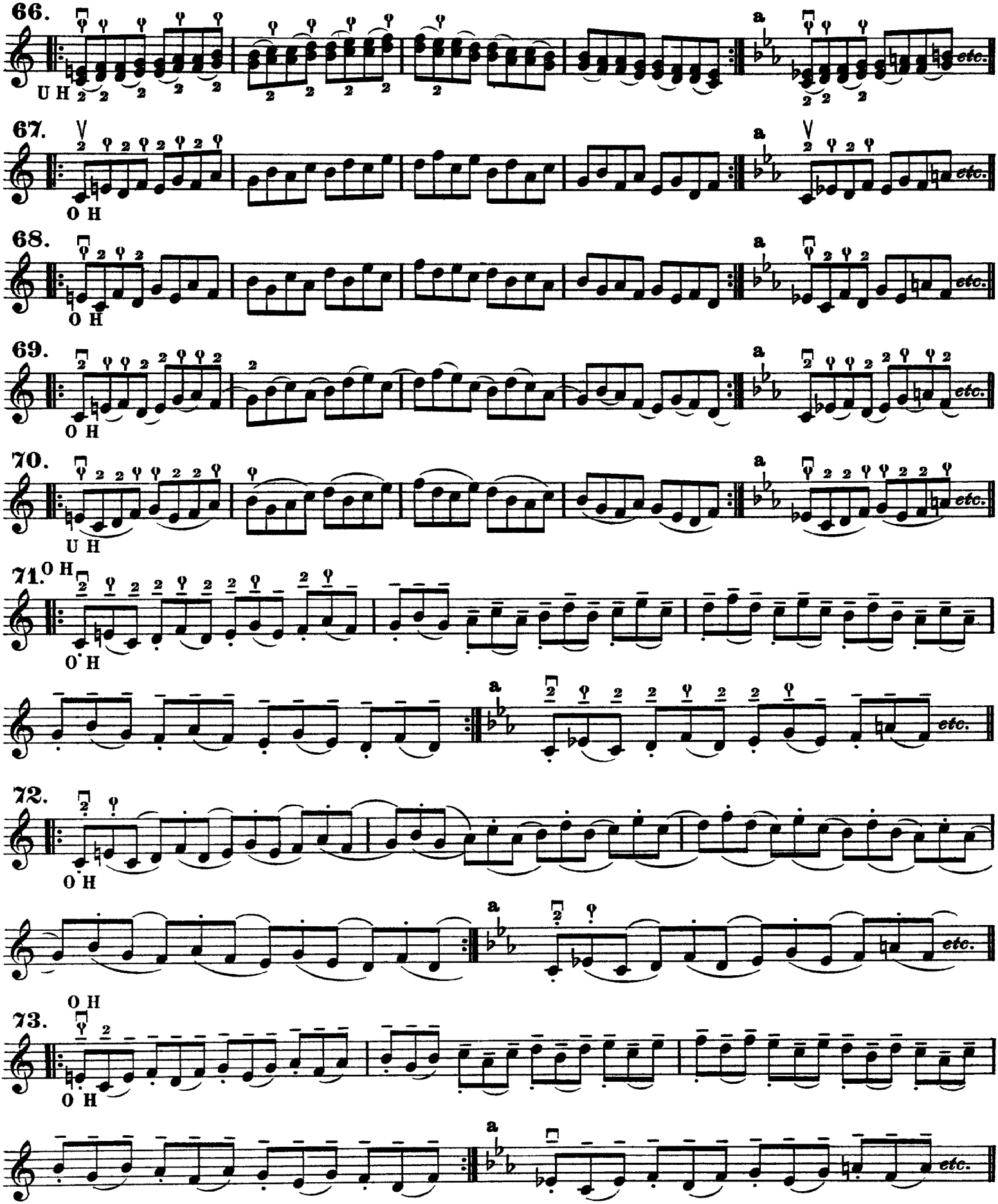

46.
O H
O H
a
O H
etc.
47.
M
O H
a
etc.
48.
M
a
etc.
49.
G B
II.ª

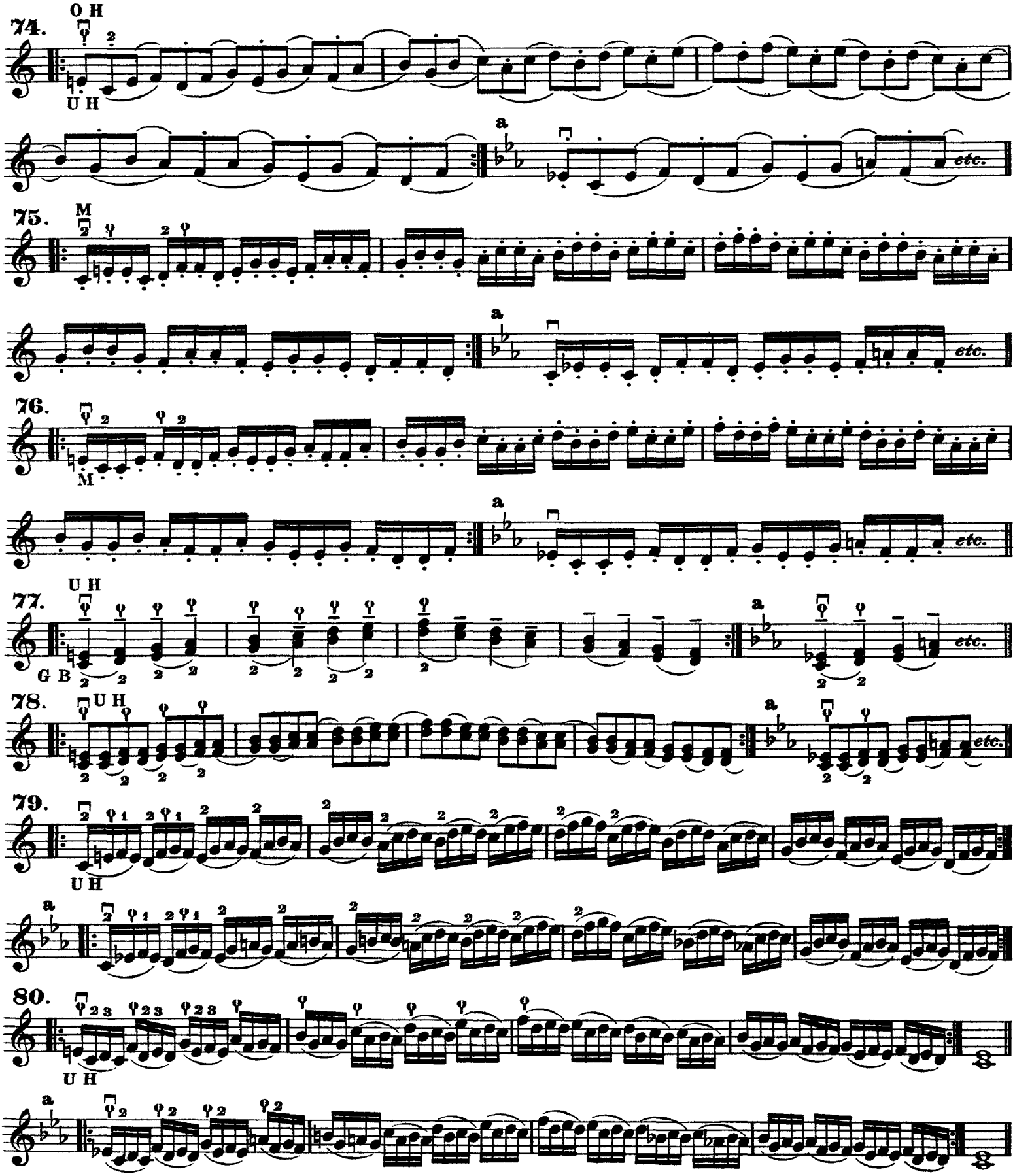

a
G B
50.
a

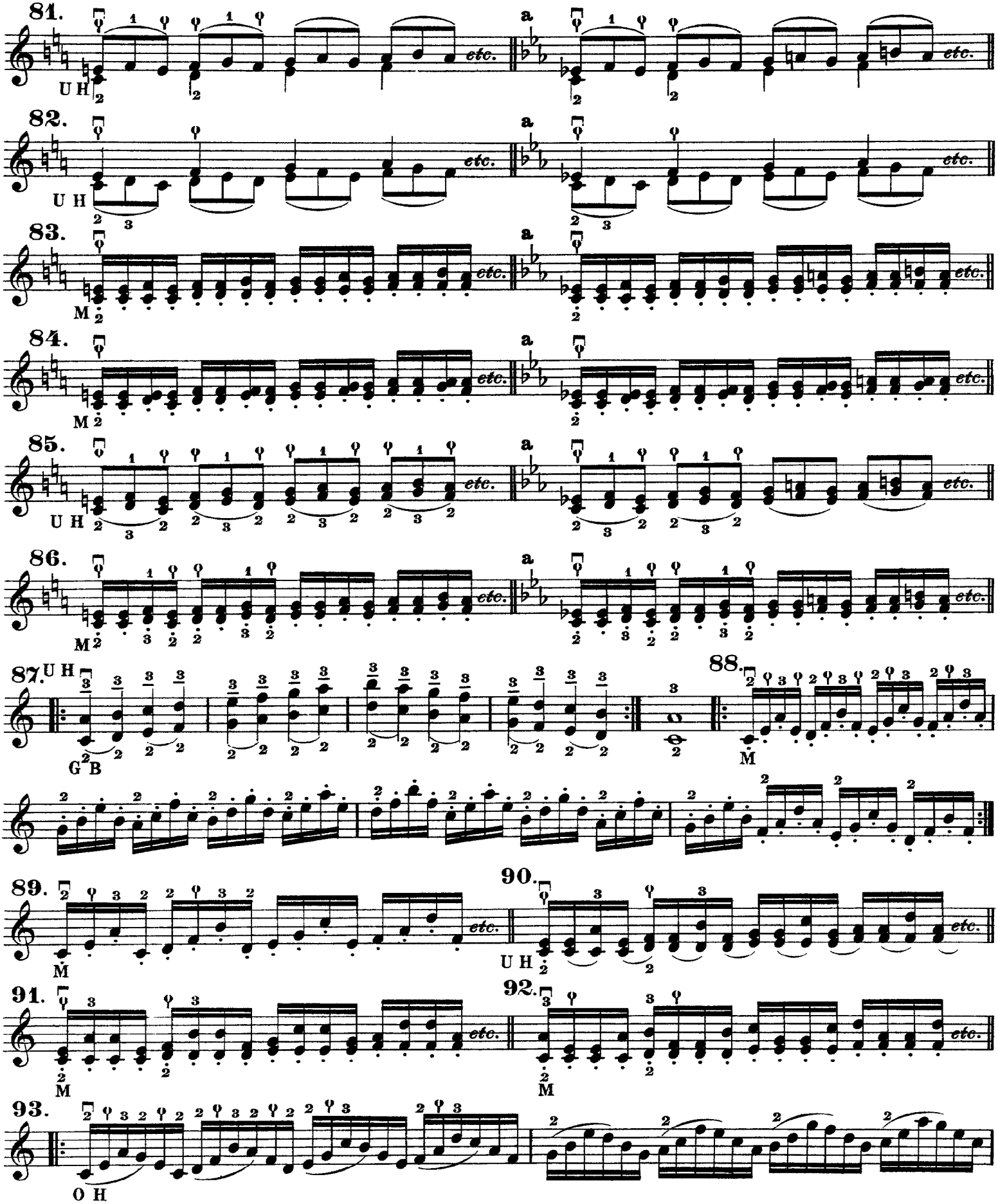

51.
a
52. U H
U H
a
53. U H
O H
a

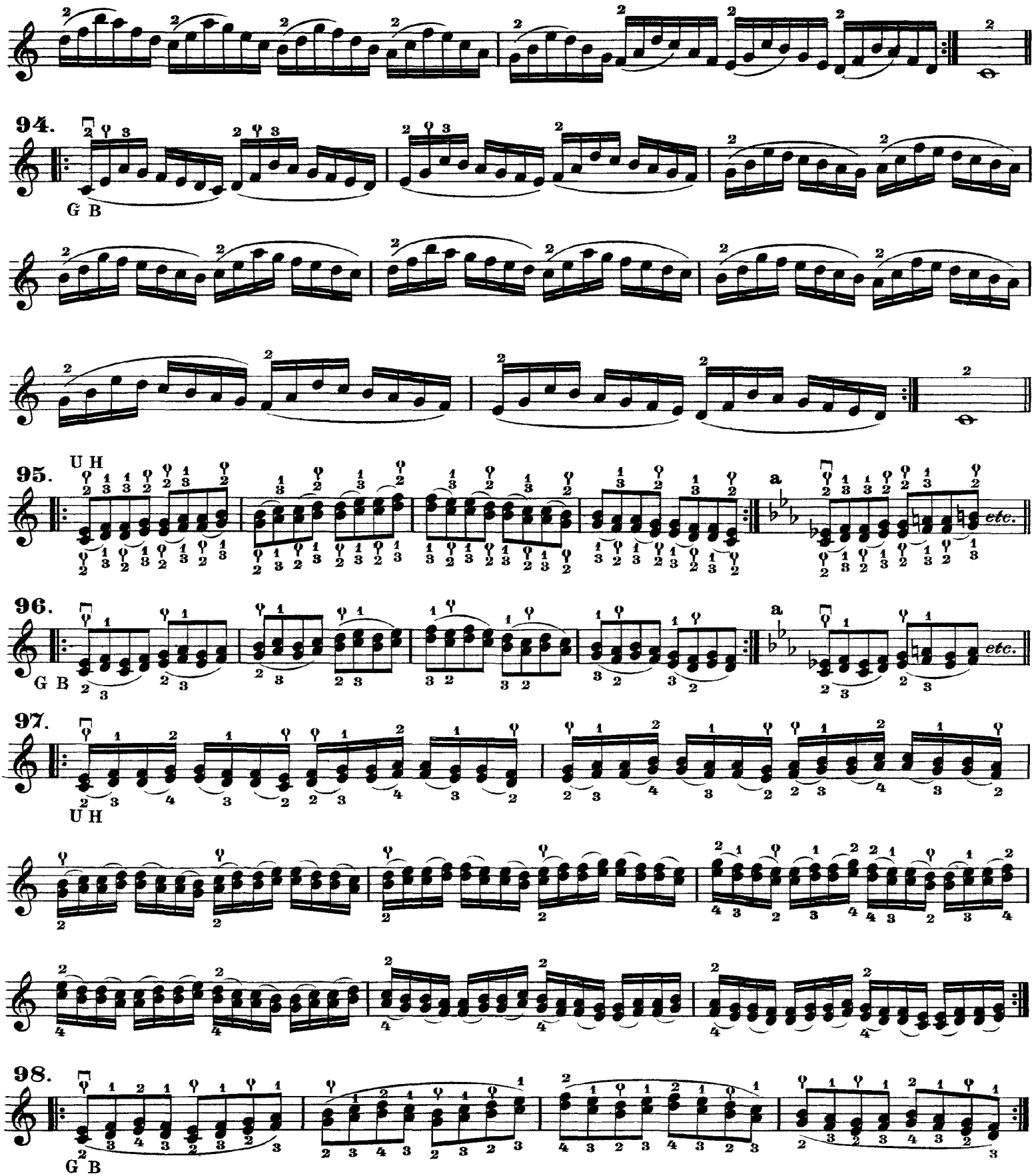

54.
G B
55.
U H
a
U H
56.
U H
57.
U H
58.
U H

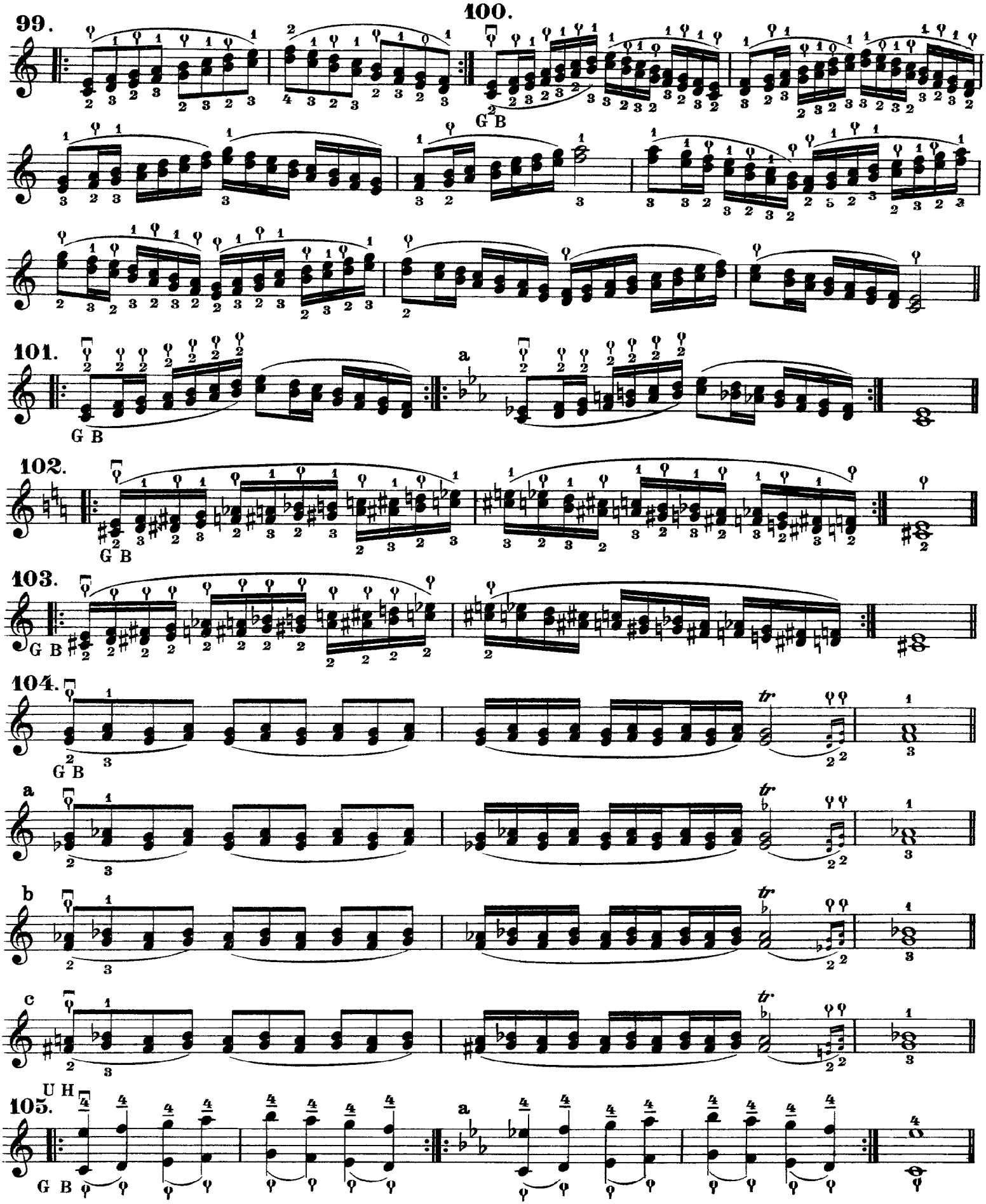

59.
G B
60.
a
61.
UH
G B
62.
UH
a
63.
G B
a
64.
UH
65.
64a.
65a.

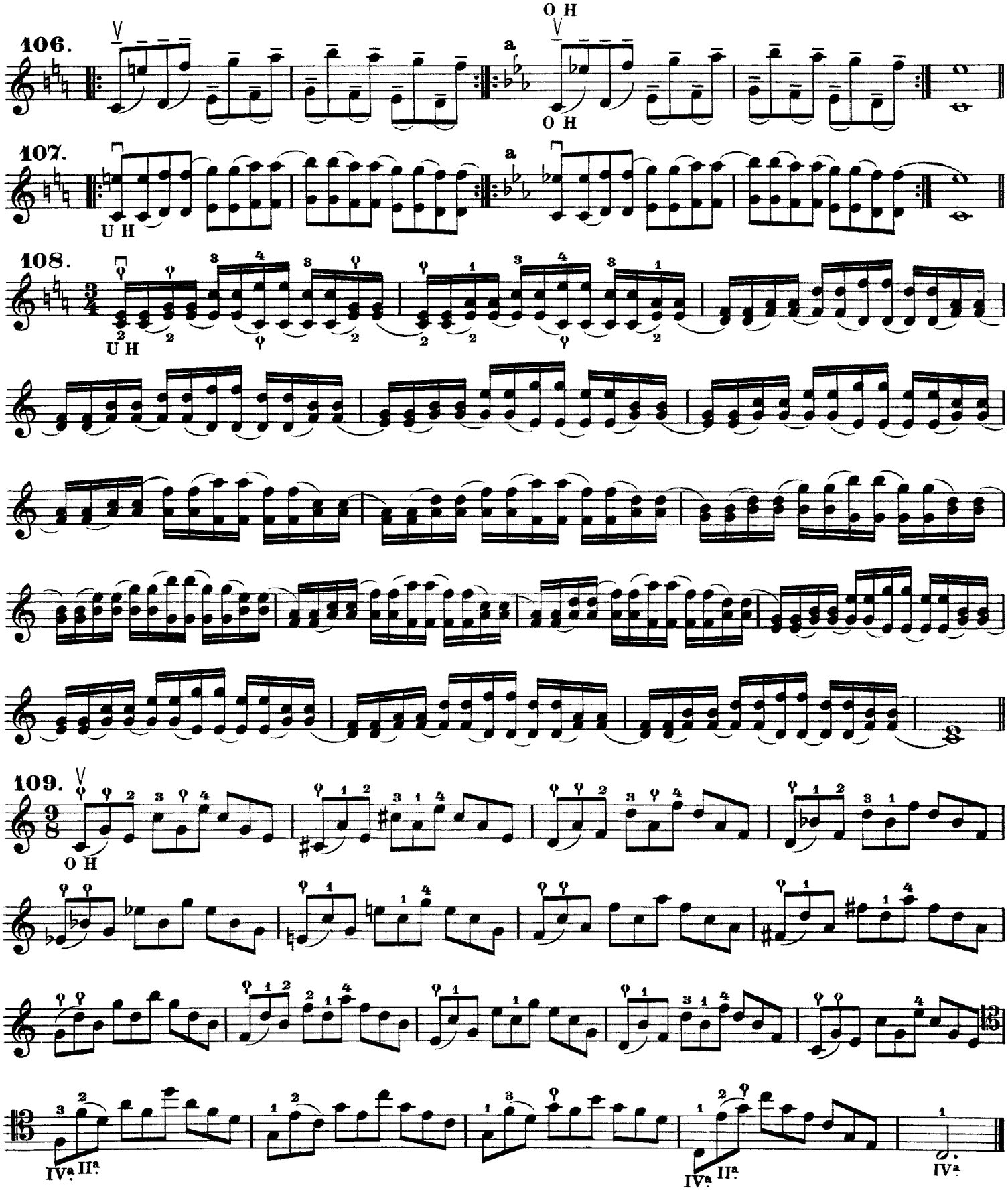

66.
U H
a
etc.
67.
O H
a
etc.
68.
O H
a
etc.
69.
O H
a
etc.
70.
U H
a
etc.
71.
O H
O H
a
etc.
72.
O H
a
etc.
73.
O H
O H
a
etc.


74.
O H
U H
a
etc.
75.
M
a
etc.
76.
M
a
etc.
77.
U H
G B
a
etc.
78.
U H
a
etc.
79.
U H
a
80.
U H
a


81.
82.
83.
84.
85.
86.
87.
88.
89.
90.
91.
92.
93.
etc.


94.
G B
95.
U H
a
etc.
96.
G B
a
etc.
97.
U H
98.
G B


99.
100.
G B
101.
a
G B
102.
G B
103.
G B
104.
G B
tr
a
tr
b
tr
c
tr
U H
105.
G B
a


106.
a
O H
O H
107.
a
U H
108.
U H
109.
O H
IV a II a
IV a II a
IV a