## THE TENOR SACKBUT OF ANTON SCHNITZER THE ELDER AT NICE<sup>1</sup>

## Henry G. Fischer

◀ he tenor of Anton Schnitzer in Nice exemplifies all the features that distinguish the sackbut from its modern descendant, the trombone (Fig. 1).2 The mouthpiece is narrower (3 cm. maximum breadth); it has a very flat rim and a sharp-edged opening at the bottom of the cup. The bore of the instrument, too, is narrower (little more than 10 mm.) as is the bell (diameter c. 10 mm.), which is only slightly flared. The bell extends farther forward, to fourth position rather than third, and is mounted on a single stay, rather than three. The walls of the bell are gradually thinned down to the point that, were it not for a decorated reinforcement at the end (the "garland"), the flared opening would easily crumple like foil. The stays are all loosely constructed, particularly those on the slide, which will be described later. The metal is hammered rather than rolled, the overall thickness definitely less than the usual 0.5 mm.,3 the tubing seamed, reinforced in the bell by a series of overlapping tabs. Many of these differences make for a greater degree of vibration and a much softer instrument, although one that nonetheless has considerable dynamic range. The tone is clear, but drier and airier than the sound to which we are accustomed, and less resonant.

Inasmuch as the two sackbuts formerly thought to be the oldest dated examples (one 1551, the other 1557) can no longer be considered valid,4 this instrument, dated 1581, and another tenor by Anton Schnitzer in Verona, made three years earlier,5 now have that honor. A third, recently acquired by Edinburgh University, is probably to be attributed to a son of the same name, to judge from the date-1594.6 In the last case, the original slide, with flat stays, has been replaced by one with round stays. This was a common practice in the 17th century, the use of round stays being attested at least as early as 1631,7 and it was evidently adopted because the round stay was easier to handle.8 Of the two dozen intact tenors and altos that have survived from the 16th-17th centuries, only five retain the older form, whereas this is to be found on all of a dozen surviving basses, one dated as late as 1671. It was retained on the bass because the stay itself was not handled, but was manipulated by a lever, which extended the player's reach as required by a longer slide. This matter will be returned to later in connection with the instrument under consideration.

As the foregoing paragraph indicates, it cannot be assumed that the early sackbuts are authentic in every particular,

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and some are by no means what they seem to be. Like the modern trombone. the ancient instrument is easily dismantled into three parts: mouthpiece, slide and bell section. In the case of the sackbut, however, the other parts, notably the bow bend at the end of the two principal sections, were not soldered and could be detached almost as easily, for cleaning or repair. This feature seems to afford the likeliest explanation for the eyelet within each bow, one of which is missing in the present case. It was certainly not intended for the appendage of banners, since contemporary iconography offers scarcely any evidence of such embellishments on sackbuts. Thus the evelets probably served for the attachment of a string which insured that the ends of the instrument would not come off.9 The bell bow was exposed to the same risk, for the instrument lacked a water key and was probably turned upside down to be evacuated. In any case, the ease with which the instrument was dismantled made it particularly susceptible to replacements and alterations.

In view of this consideration, it is quite remarkable that each of the three main elements of the Schnitzer tenormouthpiece, slide and bell section—is distinctively marked in such a way that we can be sure that they all came from the same workshop, and have no reason to doubt that they belong to the same instrument. The preservation of a demonstrably original mouthpiece is particularly extraordinary.10 It bears the name of Nuremberg in abbreviated form (NURMB), as well as a device that reappears on the bell of a bass sackbut made by another son of Anton Schnitzer, Jobst, in 1612.11 This device ( 🐯 ) consists of three triangles, doubtless representing chips of wood that are emblematic of the family name,12 which cor-

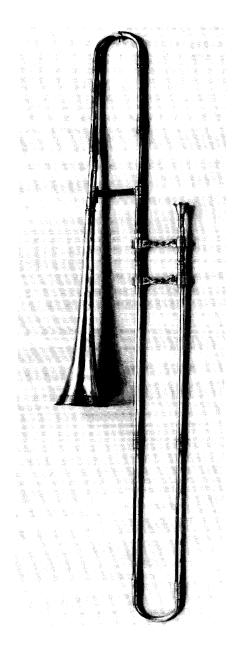


Fig. 1: The tenor sackbut of Anton Schnitzer, in the Conservatoire National du Région de Nice.

67

responds to the English patronym "Carver."

The slides, equally exceptionally, are reinforced (or simply embellished) at mid-length by a pair of rings that again bear the name of Nuremberg in someless abbreviated form (NURMBER).13 Finally, the decorative reinforcement of the bell, the "garland," provides not only the place of manufacture but the name of the maker and the year the instrument was made: MACHT ANTONI SCHNITZER A[NNO] MCLXXXI 🕸 . All this is oriented so that the inscription could be read by the player.

A further indication that the slide and bell section belong together is the fact that the ferrules on the tubing that receives the slide bow (Fig. 2) and the ferrule on the bell bow (Fig. 3 E) are identical. These reinforcements conform to a pattern characteristic of the 16th century, and continued through most of the 17th, but that shows slight variations in the zones of decoration, particularly in the crownlike edging at the rear. The style of the ferrules between the slide stays evidently conforms to these. On the other hand, two other ferrules between the bell and bell bow (A, B) are slightly but distinctly different, with four rows of small, imbricated scales instead of three larger rows, and a deeper edging, while another ferrule on the tubing opposite them (D) shows an even greater difference-three rows of scales, but no edging. The ferrule that receives the bell bow (C) is quite unlike the others, with plain incised bands, and is obviously a later replacement, corresponding to one at the beginning of the bell section, near the connection with the slide.

Between the slides are a pair of flat stays of the old style, mentioned earlier. They have removable clasps, hinged at each side, and the movable pieces at the

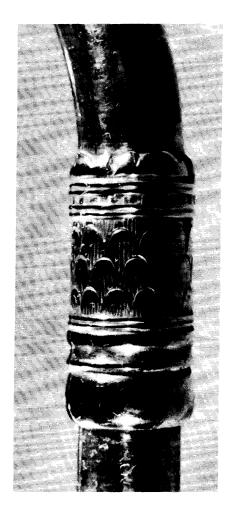


Fig. 2: Detail of ferrule on the tubing that receives the slide bow.

top are secured by toggles in the shape of legless dragons (Fig. 4). At one side of these, on the lower stay, the rounded surface shows an angel playing a lute (Fig. 5). The other flat surface provides more space for floral decoration. A hole in the center of the lower stay, by which the external slide is manipulated, must have served as the emplacement of a lever such as is found on basses. Since the tenor has

seven positions, unlike the bass, which has only six, it is surprising that this advantage was not supplied more often<sup>14</sup>—especially in view of the fact that the ancient sackbuters were probably considerably smaller than most modern trombonists. In the present case it may have been added—perhaps at a later date—to accommodate someone with a particularly short reach.<sup>15</sup>

In contrast to most of the aforementioned embellishments, the sleeve on which the bell stay is mounted shows a simple banded pattern, like the ferrule on the tuning slide, and the bell stay itself is unusually thin and plain, with straight sides and a total lack of surface decoration. In the other surviving sackbuts of the 16th and 17th centuries this stay is generally heavier and more ornate; its simplicity in the present case is totally at variance with the treatment of the slide stays. It is certainly a replacement, no earlier than the last half of the 17th century, and probably later. The replacement evidently includes the hinged attachment at the top, which is again plainer than the usual form; one would

expect it to be attached by a leaflike mounting of larger size than that which secures the eyelet within the bell bow. Such hinges began to fall into disuse within the last quarter of the 18th century, but the replacement might be as late as the first quarter of the century following. <sup>16</sup>

The replacement of the bell stay in turn throws some doubt on the antiquity of the unique tuning system of which it forms a part. As a rule, the sleeve supporting the bell stay is soldered so that the bell section cannot pivot, the bell section remaining fixed in relation to the slide. In the present case the sleeve is loose, so that the instrument is rather difficult to hold; the bell section, allowed to swivel, must be rested on the left arm of the player. The purpose of the loose sleeve was to enable the bell itself to be moved backward and forward from a supplementary slide that projected from the bell bow. In its present state the bell can only be advanced 3 cm., the sleeve being checked by a ferrule that bears a similar series of plain bands, but is somewhat longer. Although sackbuts with a

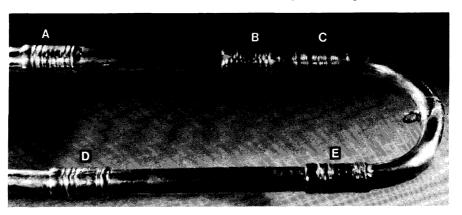


Fig. 3: Five different ferrules appear on the bell bow tubing: A and B have four rows of small imbricated scales and deep edging; C, a later replacement, is unlike the others, but corresponds to one at the beginning of the bell section; D has three rows of scales but no edging; E matches the ferrules on the tubing that receives the slide bow (see Fig. 2).

FISCHER 69

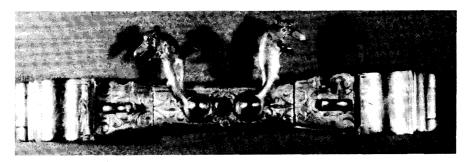


Fig. 4: The flat stays have removable clasps, hinged at each side, with the movable pieces at the top secured by toggles in the shape of legless dragons.

stationary stay usually have a ferrule here, its location is certainly inappropriate in the present case. This circumstance suggests that the slide stay was previously mounted 3 cm. farther back on the bell, for if the tuning slide is removed (Fig. 6) it is seen to be 7.25 cm. in length beyond the ferrule, divided into clearly marked segments of 2.2, 2.0, 1.75 and 1.2 cm., each preceded by a space of 0.1 mm. Since all but the last of these segments were evidently meant to be used, they provide for slightly more than twice the present limit of extension. But the ferrule at the end of the tuning slide shows the same plain banded pattern as the sleeve of the stay and the ferrule that checks it, so that all the elements of the tuning system are evidently of the same date, considerably later than the rest.

It is just possible, however, that the present tuning system is based on an earlier one, inasmuch as Schnitzer introduced an equally extraordinary, though completely different, system of tuning in his 1579 tenor, now in Verona. Here the adjustment is provided by enabling the lower bow bend to be withdrawn, along with a pair of supplementary slides that elongated the outer ones by as much as 60 cm. Obviously, only a small part of this extension was actually used, for it would not have held in place if the bow

bend had been withdrawn very far. So far as is known, neither of these tuning systems was used again, although another odd instrument of Schnitzer's—his convoluted trumpet in Verona, dated 1585—was duplicated by his son Anton only a few years later (1598).<sup>17</sup> In none of these cases, of course, can we be sure that Schnitzer was the inventor of the novel feature, but it seems more than coincidental that three of his four surviving instruments apparently show unusual variations.

Apart from the presence of the tuning slide, the structure of the bell section displays several deviations from what would normally be expected, as may be seen by comparing the schematic drawings in Fig. 7. As a rule, a single tube of slightly expanding diameter intervenes between the bell bow and the small end of the bell itself, and its connection is located behind the bell stay. Instead of this we find, in the present case, two sections of tubing. The first, which receives the tuning slide, is of uniform diameter for half its length, after which it expands very slightly. The second continues the same degree of expansion, and joins the bell in front of the bell stay rather than behind it; thus the stem of the bell is somewhat shorter than usual. This complication is difficult to explain, since the

tuning slide could have been more neatly accommodated by using a single intermediate tube. Equally inexplicably, the second segment of tubing fits into the small end of the bell instead of receiving it, as is generally the case, and the small end is reinforced with a ring that is engraved with a ropelike pattern. It seems possible that the extra section of tubing and the odd fitting of the bell are the result of damage to the stem of the latter, which is extremely vulnerable; many other examples show repair at precisely the point where the bell begins in the present case. As a rule, however, the repair is effected more simply.

It is also difficult to explain why a joint appears in the parallel tubing of the bell section. Although an extra joint is likewise to be found in another sackbut of the mid-17th century, it is located farther forward, in line with the joint that receives the bell.<sup>18</sup>

Some doubt is also raised by the fact that, as already noted, all three of the ferrules that reinforce the connections just described are slightly different from those that certainly belong to the original instrument, although they are of earlier style than the sleeve that supports the replaced bell stay, or the replaced ferrules in front of this sleeve and at the end of the tuning slide. If the odd featurs were occasioned by damage, the damage seems to have occurred relatively early.<sup>19</sup>

It is difficult to say whether yet another unusual feature of the instrument has a bearing on this question—namely the total length of the air column, which measures 270 cm., excluding the mouth-piece. It is appreciably greater than the length of most other tenor sackbuts of the 16th-17th centuries, which tend to measure about 262 cm., and is almost equal to the length of the modern trombone. Furthermore, as we have seen, the length could be extended at least another

6 cm. by means of the tuning system. The tenor of Schnitzer in Verona conforms to the more customary length (262 cm.), although its tuning system provides for a much longer extension than does the one in Nice.

Yet another surprising feature is the presence of a pair of stockings, 4.8 cm. long, at the ends of the interior slide. These are very thin sleeves (0.3 mm.), which were soldered to the tubing to reduce friction when the slide was moved. Such stockings are now a standard feature on trombones, although the enlargement is produced by expanding the end of the tubing rather than by adding a separate thickness. Despite the ultimate success of the idea, it did not find general acceptance until the second half of the 19th century. I am inclined to think that the sleeves were the work of Schnitzer, however, because they are required by the amount of space between the inner and outer slides, and both sets of slides are evidently original.20 The inner ones have as large a bore (10.3-10.5 mm.) as would be expected, that of Schnitzer's tenor in Verona being 9.8 mm. And the diameter of



Fig. 5: On the lower stay the rounded surface shows an angel playing a lute.

cm

the outer slides seems to be guaranteed by the ornamental reinforcements at midlength and by the ferrules at the ends, the date of which is beyond question.

It may also be noted that the slide bow is of slightly smaller diameter than the outer slides, which explains the fact that both ferrules point downwards. More usually the one on the side of the mouthpiece faces down, reinforcing the end of a slide, the other up, reinforcing the end of the bow, and the diameter of the bow is identical to that of the outer slide. The superbly decorated bass by Isaac Ehe, 1612, provides an illuminating comparison; here again both ferrules point downward, but although the tubing of the bow appears to continue the same diameter as the slide, its walls are very thick (0.9 mm.), so that the bore is actually appreciably reduced, as in the present case.21 Experimentation has shown that the decreased bore of the bow has corrected the internal tuning of Ehe's instrument.22 In other cases, a similar decrease in the diameter of the tubing is sometimes found in the bell section, just beyond the connection of the slide, and doubtless for the same purpose.23

To sum up, the Nice sackbut is one of the very earliest surviving instruments of its kind, and one of the very few that retains its original mouthpiece and its original flat stays. Given the authenticity of all the essential elements except the bell stay and tuning slide, which are of later date, it is extraordinary how many

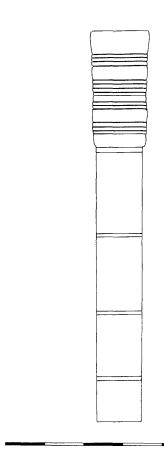


Fig. 6: Drawing of the tuning slide, showing the marked segments.

unusual features it displays. It can be declared, without exaggeration, to be one of the rarest and most intriguing instruments of any period.

## **Notes**

1. This article is due to the initiative of Jacques Foussard, who requested it for a catalogue of wind instruments in the collection of the Conservatoire National du Région de Nice, to be published in French and English. He has kindly authorized me to publish the English version here. My article owes much to the unfailing help he has given me at Nice and in the course of a long correspondence. The photographs were taken by Maurice Bérard, Nice. I am also obliged to Robert Barclay for reading the manuscript and for making some queries that have improved its clarity.

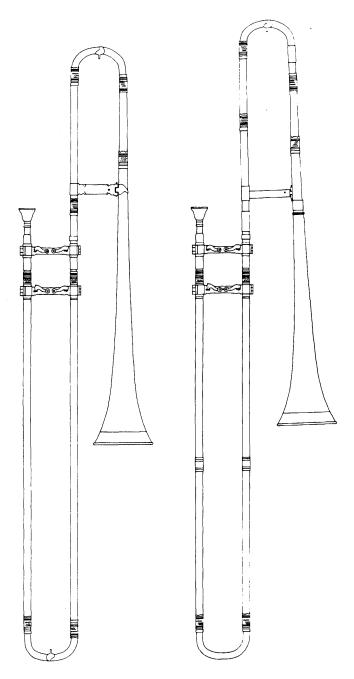


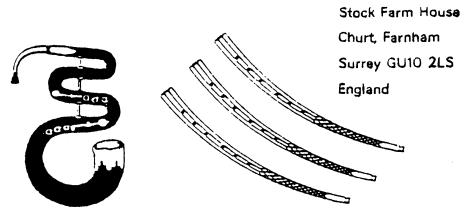
Fig. 7: Drawing of the Schnitzer trombone (right) shows how its bell section deviates from what might be expected (left).

- 2. Described in some detail by Bernard Fourtet in La Sacqueboute: facture, approche, technique et emplois de l'instrument à coulisse aux xvie et xviie siècles (these de Maîtrise de Musicologie, Conservatoire de Musique de Toulouse, juin 1979), Chapter V. This study contains a number of interesting observations, and I am indebted to the author for supplying me with a copy. So far as the description of the Nice sackbut is concerned, however, the present account diverges from it in many respects.
- 3. Not yet measured with accuracy, but perhaps comparable to the tenor of Sebastian Hainlein Jr., 1631, in Frankfurt, which Dieter Arzt has found to be 0.35 mm.
- 4. The first is by Erasmus Schnitzer (Germanisches Nationalmuseum, Nuremberg, MI 170), which has a trumpet bell, with other elements subsequently added; the second is by Hans Neuschel (Kunsthistorisches Museum, Vienna), a cut-down bass of which only the very end of the bell can be regarded with certainty as being original. The problems of these and other instruments will be dealt with more fully in a revised edition of my *Renaissance Sackbut*, initially published by the Metropolitan Museum of Art, New York, 1984.
  - 5. Academia Filarmonica 13,301.
- 6. See Willi Worthmüller, Die Nürnberger Trompeten- und Posaunenmacher des 17. und 18. Jahrh. in Mitteilungen des Vereins fur Geschichte der Stadt Nürnberg 45 (1954), p. 213; 46 (1955), p. 464. He points out that instruments bearing this name can only be attributed with certainty to the father if they are dated prior to 1591, in which year his son Anton (born 1564) was married and began to work on his own. On this basis, no fewer than four instruments can be credited to Anton the Elder. In addition to the two mentioned here, he made one of the earliest surviving Renaissance trumpets, dated 1581 (Kunsthistorisches Museum, Vienna, 258, only slightly later than that of Jakob Steiger, Basel, 1578) and another, of convoluted form, dated 1585 (Academia Filarmonica, Verona, 13,303).
- 7. By the tenor of Sebastian Hainlein Jr., in Frankfurt (Historisches Museum 4382), the slide of which is evidently contemporaneous with the bell section.
  - 8. This question will also be taken up in a revised version of my Renaissance Sackbut.
- 9. Ibid., p. 19, referring to Philip Bate, *The Trumpet and Trombone* (London, 1966), p. 77. Contrary to my drawing in *Renaissance Sackbut*, p. 57, the string for the eyelet on the slide was probably quite short, attached to the adjacent ferrule on the mouthpiece side.
  - 10. For details, see my Renaissance Sackbut, pp. 29-31.
  - 11. Musikinstrumenten-Museum der Karl-Marx-Universität, Leipzig, 1908.
- 12. Cf. Renaissance Sackbut, p. 29, referring to Helmut Nickel, former Curator of Arms and Armor at the Metropolitan Museum, who explains this as a house emblem.
- 13. It should be noted that all four of the straight tubes of the slides have been replaced to enable the instrument to be played, but there is no reason to suspect that the bands were not made for the original slides, which, although much worn with use, are still preserved. And the bow has been remounted on the new tubing exactly as it was before.
  - 14. For this question, see Renaissance Sackbut, p. 26 and n. 73.
- 15. Discussed by Fourtet, op. cit., p. 105, who thinks that the floral decoration at the center was completed before this hole was made, although he does not identify the use of the hole for a lever.
- 16. See Herbert Heyde, *Trompeten, Posaunen, Tuben* (Leipzig, 1980; Wiesbaden, 1985), p. 258; fig. 11 shows an example without a hinge dated 1789, but a hinge appears in a later example (fig. 12) dated c. 1830. The hinge is again absent on a set of sackbuts dated to 1814 or earlier: Galpin Society, An Exhibition of European Musical Instruments, Edinburgh University, Aug. 18-Sept. 7, 1968, nos. 395-397.
- 17. For the older trumpet see note 6. The later one (Vienna Kunsthistorisches Museum 181) is almost identical, lacking only a pair of medallions within two of the loops.
- 18. The same feature appears in a tenor, anonymous and undated, in the Stearns Collection, University of Michigan, 890, but in this case the bell section is almost entirely restored

except for the bell stay. The valid example is a bass by Wolf Birckholz, 1650, Musikinstrumentenmuseum der Karl-Marx-Universität, Leipzig, 1896.

- 19. Little, unfortunately, is known of the more recent peregrinations of the sackbut beyond the fact that is was bequeathed by Antonio Gautier (1825-1904) to his native city, along with the remainder of an important collection of instruments and a musical library. Gautier was a municipal counsel in the service of Nice and subsequently, after the referendum of 1860, of Benevento and Naples. It is thought that he might have made this particular acquisition during his years in Italy, but there is no record of the date or place.
  - 20. Cf. note 13.
- 21. Germanisches Nationalmuseum, Nuremberg, MI 168. A radiograph of the slide bow is available (RB 1364).
- 22. By Geert Jan van der Heide of Putten, Netherlands, who has kindly given me this information.
  - 23. Renaissance Sackbut, p. 10 and n. 38.

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