

ACOUSTICS2008/2893 Tristan trumpet or English horn?

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In Act III of his opera "Tristan und Isolde", Richard Wagner wrote an instrumental tune to be (apparently) played by a shepherd. This was originally scored for, and is customarily played by, an off-stage cor anglais. Wagner indicated that he would have preferred some form of wooden trumpet, similar to a small-scale alphorn. A few such instruments have been built. These are pitched in 4-foot C, with a pear-shaped bell similar to that of the cor anglais, and a single metal whole-tone valve. The Utley Collection at the National Music Museum, The University of South Dakota, has two such instruments: one made by Gebrüder Alexander (Mainz), formerly used in the National Opera in Prague (Volkstheater), the other a copy of a trumpet by Martin Lehner, Munich, in the possession of the Staatsoper Dresden, made by Andreas Schöni and Rainer Egger (Bern and Basel). We will compare sound spectra of the Tristan trumpet with that of the cor anglais. We will also compare the acoustic input impedance of the Tristan trumpet with that of an ordinary trumpet of the same pitch.