



## EAR TRUMPETS

One of the earliest hearing aids was the “ear horn” or “ear trumpet.” Its basic shape consisted of a cone, which concentrated – and thus amplified – sound, and a tube, which was inserted into the ear. With the “ear horn” inserted, the person using the device would point the cone in the direction of a sound source in order to capture, concentrate and amplify the sound. The concentrated sound then traveled up the tube and into the user’s ear, allowing the user to hear better.

Ear horns were first introduced in the 1800s in Europe. They gained the immediate attention of naval authorities who used them for ship-to-ship communication. Gradually, civilian society adopted these instruments in order to assist those who had lost all or part of their sense of hearing. By the middle of the 19<sup>th</sup> century, ear horns were commonplace, and there were a variety of styles and sizes from which to choose.

The science of the ear horn produced the greatest difficulties for its users. The larger the horn or trumpet, the better it gathered and amplified the sound. However, large ear horns were bulky, difficult to transport, and embarrassing for the user. Smaller ear horns were less obtrusive and could easily be concealed. However, they neither amplified sound efficiently nor effectively. This problem plagued the ear trumpet throughout the 19<sup>th</sup> century.

The beginning of the end for the ear horn came with the invention of the telephone. Alexander Graham Bell’s invention resulted from his work to improve the hearing of his deaf clients. Because the telephone could control the loudness, frequency and distortion of sounds, it was the perfect device for the hearing impaired. The first electronic hearing aid appeared in 1898. By the 1920s, Western Electric Company was making and selling portable hearing aids that weighed only 7 pounds. Competition in the 1920s and 1930s improved hearing aid designs, but it was the miniaturization techniques developed during World War II that allowed for truly portable, effective and concealable hearing aids available.

Today, ear horns and ear trumpets appear in cartoons and films and are used to deride the user as old, ignorant or old-fashioned; a much different purpose than originally intended.