

brain is thrown out of action by some lesion, or they are unable to use the right hand from any cause, then they cannot use the very faint impression in the right brain. Instead, when they endeavor to write with the left hand, they slowly and laboriously trace ordinary writing, and the result is usually very imperfect. With long practice, however, it may be improved.

In a naturally left-handed person, on the contrary, the impression in the right brain is good, and, although such an individual has always been forced to write with his right hand, when anything happens to prevent this, then he has the right brain and left hand to fall back upon, and the result is left-handed (or natural) mirror writing. Thus are explained to my mind the numerous cases recorded of right hemiplegia with development of mirror writing. This writing is not a diseased condition, but the (to the patient) artificial form of writing being rendered impossible by the disease, as it would

*Just as steam by its gain upon
time over distance has reduced
the space which separates countries,
so will sound commercial in-
formation form the most ef-
fectual means of diffusing
knowledge by its interchang-
ing the ideas of mankind.*

E. A. R.

LEFT HAND.

be by tying his right hand behind the back, he reverts to his natural type of chirography. This is also the view taken by Professor F. J. Allen (*Brain*, Vol. xix, 1896, page 385), himself a mirror writer.

The best historical example of a change from right-handed to left-handed writing, (I quote from Ireland's paper,) "is that of the MS. of the 'Codex Atlanticus' of Leonardo da Vinci, in the Ambrose Library at Milan. It was generally said that in adopting this singular style of writing, Leonardo wished to preserve his work from the eyes of superficial readers; but we can give another explanation. There is a diary in the National Library at Naples of the priest Antonio de Beatis, who, in 1517, travelled in the train of the Cardinal of Arragon through Germany, the Netherlands and France. The Cardinal visited Leonardo da Vinci, who passed the last years of his life in the neighborhood of Amboise, in a villa given to him by Francis I. De Beatis remarks of the famous artist, in his