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- Treaties. Nicaragua. Protocol of an agreement between the U. S. and Nicaragua for the construction of an inter-oceanic canal, 13.
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- United States.—Superintendent of Documents.
 Bibliography of U. S. public documents relating to inter-oceanic communication, 2.
- Upp, J. W. Electric operation of Panama canal locks, 64.
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- View of the Isthmus of Panama, 69.
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- What the chambers of commerce of New York and other cities have to say about the Nicaragua canal, 30.
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- Writings on American history, 2.
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