



Smithsonian  
*National Museum of American History*  
*Kenneth E. Behring Center*

## Nathan Kane Innovative Lives Presentation

NMAH.AC.0637

Alison L. Oswald

1998

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	Nathan Kane Innovative Lives Presentation
<b>Identifier:</b>	NMAH.AC.0637
<b>Date:</b>	1997 September 17
<b>Extent:</b>	0.5 Cubic feet
<b>Creator:</b>	Kane, Nathan, 1969- Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation.
<b>Language:</b>	English
<b>Summary:</b>	Collection consists of original, master, and reference videos documenting Nathan Kane, inventor of Pass-It-Football, a remote control for television, Project-A-Sketch opaque projector for children and low distortion bellows folds for industrial machines.

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## Administrative Information

### Immediate Source of Acquisition

This collection was created by the Innovative Lives Program of The Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation on September 17, 1997. The Innovative Lives series brings young people and American inventors together to discuss inventions and the creative process and to experiment and play with hands-on activities related to each inventor's product.

### Ownership and Custodial History

The collection was transferred to the Archives Center on March 10, 1998.

### Processing Information

Collection processed by Alison Oswald, 1998.

### Preferred Citation

Nathan Kane Innovative Lives Presentation, September 17, 1997, Archives Center, National Museum of American History.

### Restrictions

Collection is open for research.

## Terms Governing Use and Reproduction

Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Other intellectual property rights may apply. Archives Center cost-recovery and use fees may apply when requesting reproductions. Signed copies of releases on file.

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## Biographical Note

Nathan Kane (1969-), is an inventor of several inventions that range from toys to industrial equipment. As a graduate student at the Massachusetts Institute of Technology (MIT), Kane won the Lemelson-MIT Student Prize in 1997, for his inventiveness. The Lemelson-MIT Prize honors distinguished careers in invention each year. Kane's invention of an ultra-low distortion bellow fold patterns allow extremely light-weight, structurally rigid, long-extending bellows to be made inexpensively from a single sheet of foldable plastic. Traditional bellows, by comparison, are much heavier and more expensive to manufacture, because they consist of a complex assembly of fabric layers sewn to stiffening panels. Kane's folded patterns have many applications, such as making collapsible containers, expandable shelters, low cost pumps, and low cost protective bellows for industry. The increased extending ability means two to three times less material is needed for production, which cuts cost. The bellow is also two to three times lighter and more compact when folded, allowing machines that use the bellow to move further and, for precision applications, more accurately. Kane also invented the Pass-It television remote. This television remote is built into a foam rubber football so viewers can pass the remote with ease. Another invention is the Project-A-Sketch--a projector intended for children and which displays art or solid objects onto a wall.

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## Scope and Contents

This collection contains original, master, and reference videos documenting Nathan Kane, inventor of low-distortion bellow folds for industrial machines, the Pass-It # television remote control, and the Project-A-Sketch# opaque projector for children. This video was created on September 17, 1997.

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## Arrangement

The collection is divided into four series.

Series 1: Original Videos

Series 2: Master Videos

Series 3: Reference Videos

Series 4: Photographs and Slides

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Bellows (Mechanical engineering)  
Industrial equipment -- 1980-2000  
Inventions -- 1980-2000  
Inventors -- 1980-2000  
Projectors  
Slides  
Toys -- 1980-2000

Types of Materials:

Interviews -- 1980-2000  
Oral history -- 1990-2000  
Photographs  
Videotapes -- 1990-2000

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## Container Listing

Series 1: Original Videos (OV 637.1-7), 1997-09-17

*Box 1*

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## Series 2: Master Videos (MV 637.1-3), 1997-09-17

*Box 2*

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## Series 3: Reference Videos (RV 637.1-3), 1997-09-17

*Box 3*

*[Return to Table of Contents](#)*



## Series 4: Photographs and Slides, 1997-09-17

*Box 3, Folder 1*

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