Magic Trick Problem

You have been approached by the well-known magician Teller (the quieter half of the duo Penn and Teller). He is interested in using intellectual property to protect one of his more striking tricks, which he calls "Shadows." At your request, he has written up a short description of the trick. Here are some of the possible scenarios he is afraid of:

- 1. A disgruntled assistant offers to sell the secret of the trick on eBay.
- 2. Fans post unauthorized videos of Teller performing the trick.
- 3. Other magicians start performing similar tricks, stealing away his audiences.
- 4. A magic supply company starts selling kits that promise to let anyone perform "Teller's Rose and Shadows trick."

Advise Teller on which forms of intellectual property he can and should employ, and what if anything he needs to do to secure those forms of protection. If you need more information from him, explain what you need to know and how the answer would affect your advice.

Notes: Ignore the statement in the description referring to "1983"; assume that the problem is set in the present day. Video of the trick is available online at https://www.youtube.com/watch?v=etuVHEHF3FM, but for purposes of the problem, you should assume that this clip does not exist.

SHADOWS

by Teller

SETTING:

Stage center is a projection screen composed of a piece of paper 4 feet high and 3 feet wide, stretched on a frame, supported by an easel.

Six or seven feet directly downstage of the screen is a small spotlight at stage floor level. It shines up at the screen.

Between the two, supported on a little table, is a rose in a bud vase. The rose has a central stem topped by a red blossom, and a branch with leaves on either side.

When the spotlight is turned on, the vase and rose cast a sharp shadow on the screen.

CHARACTER: The Murderer. He carries a large, glistening dagger.

HISTORICAL NOTE: This gothic pantomime has been performed by its creator over 1100 times since 1976. It's about time he registered a copyright, don't you think?

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ACTION:

The stage is dark.

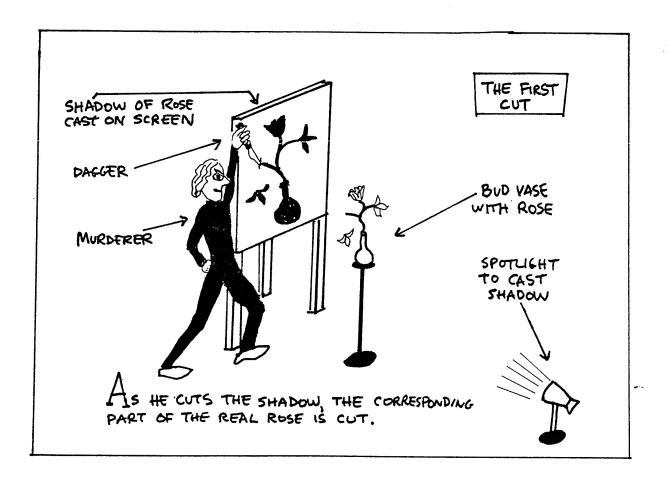
The spotlight is slowly illuminated, revealing the rose and the vase, and casting their shadows on the screen.

The Murderer becomes visible, lurking stage right, turning his dagger thoughtfully in his fingers.

He looks up and sees the rose. He takes a few steps towards it.

He notices the shadow, and takes a few more steps, bringing himself to the (stage right) edge of the screen.

He looks down at the (stage right) branch of the rose. He looks back at the shadow of that brnach. He raises the dagger.



He places the tip of the dagger on the paper screen, just at the point where the shadow of the branch joins the shadow of the leaves. He stabs gently through the paper.

The (stage right) leaves of the real rose fall, breaking from the stem at exactly the point where the shadow was cut.

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The Murderer pauses, then glides to the far (left) edge of the screen. He looks at the remaining (stage right) leaf-branch.

Again he cuts through the shadow, and again the corresponding real rose leaves fall.

He looks at the blossom.

He raises the dagger, placing its tip on the shadow of the stem just where it joins the blossom. He pierces the paper.

One by one petals start to fall.

He twists the knife. More petals fall. Only one remains.

He gives a final jab. The last petal drops off.

He lowers the dagger. He contemplates the stem of the rose, now pruned of its leaves and its flower.

As he turns the dagger thoughtfully in his fingers, he accidentally pricks his right thumb on the point of the knife.* He reacts, drawing a quick breath, and bringing his thumb quickly to his mouth to suck the blood from the wound.

Abruptly, as if struck by an idea, he looks at the rose stem, and up at the shadow of the rose stem. He lowers his thumb, looks at the wound, and up at the screen.

Slowly he raises his hand, thumb pointing downward, casting its shadow crisply on the brightest portion of the screen.

With his right index finger, he pushes along the pad of the thumb, as if trying to force blood out of the wound.

From the tip of the <u>shadow</u> of his thumb a small stream of blood emerges and, red and <u>glistening</u>, runs down the surface of the paper.

He sees the blood. He reaches up and touches the stream with the heel of his right hand. It is real.

He looks out startled towards the audience. As he turns outward, his hand slides down the stream of blood, spreading its color down the paper in a broad, butcher smear.

The light fades out quickly.

THE END

*Variation: He reaches out to take the stem of the rose, but, as he grasps it, he pricks his thumb on a thorn.

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