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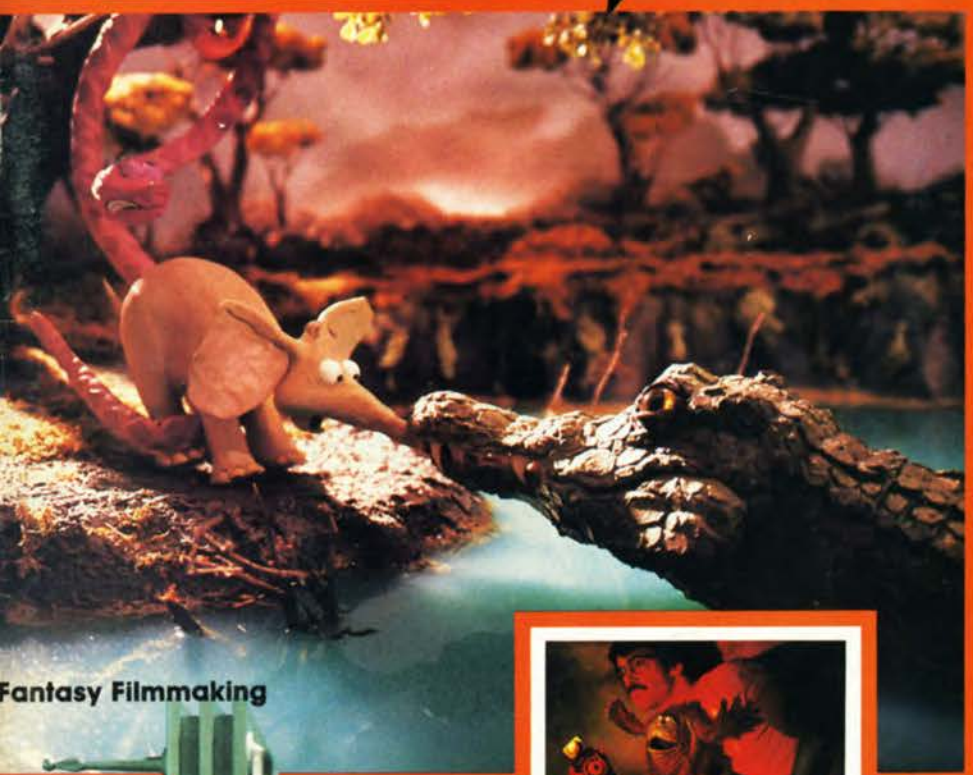

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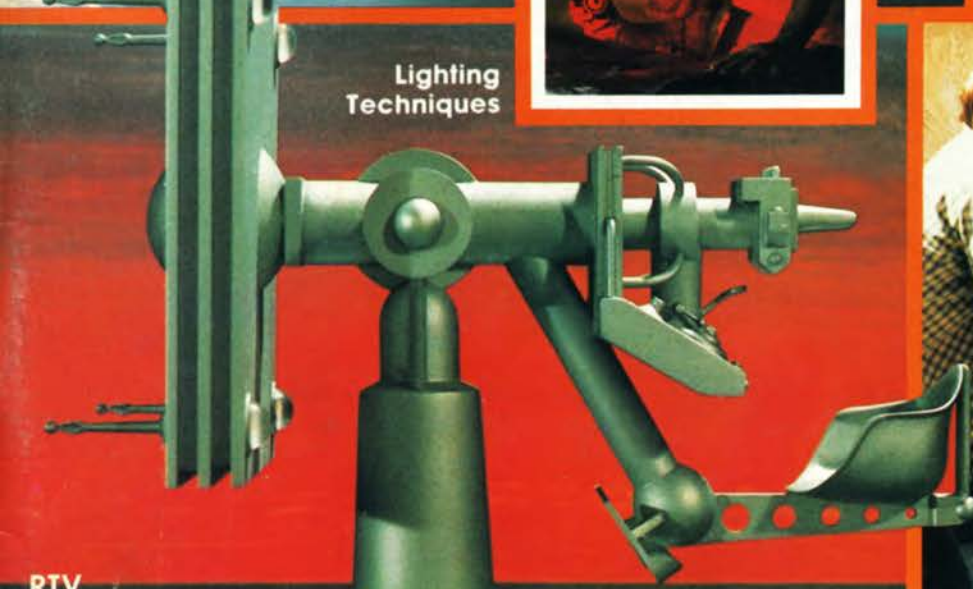

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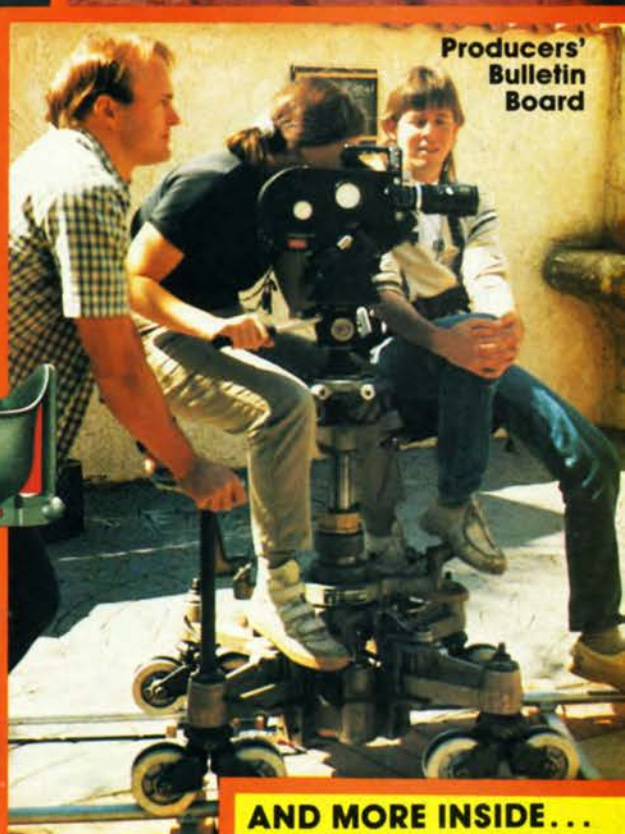


Producers' Bulletin Board

AND MORE INSIDE...

By PAUL MANDELL

Jack the Giant Killer

The bizarre story behind a forgotten fantasy film.

Louis MacManus' early concept of the sea monster.

Imitation, they say, is the sincerest form of flattery, but more often than not, the imitator botches the job. The very act of trying to siphon the power of an original work into a copy-cat production courts disaster from the start, especially when a group of people attempt to copy the binding creative force responsible for the original's success. We've seen it happen time and again—witness the rash of remakes that pale (and pall) when compared to the seminal works of the original artists, be it *Imitation of Life* or *King Kong* or *Invaders From Mars*.

Consider the cash-in mentality of *Son of Kong*, which not only lacked the grandeur of the parent film but also the creative input of Willis O'Brien. Warner's idea of capitalizing on the success of *One Million Years B.C.* (already a remake) resulted in *When Dinosaurs Ruled the Earth*, a technically interesting but inferior film. Even *I Was a Teenage Werewolf*, critically reprehensible in its day, evoked a genuine creepiness blatantly lacking in producer Herman Cohen's attempt to "rework" it as *Blood of Dracula*. And so it goes.

Chances are you haven't seen *Jack the Giant Killer*. Begun in 1960 and released in 1962, it was producer Edward Small's attempt to cash in on the unprecedented success of *The 7th Voyage of Sinbad*. He went so far as to get the same director, the same hero, the same villain, and hired others to imitate the Dynamation technique devised by Ray Harryhausen. Problem was, he couldn't get Ray Harryhausen. "Dynamation" was still a secret in Hollywood—Ray's meticulous way of preplanning the effects for *Sinbad* and shepherding the entire production was not understood by Small.

As it turned out, *Jack the Giant Killer* was a technical nightmare. It took 10 months of grueling work by two effects facilities to come up with what Harryhausen had polished off in three or four months. The model work was grossly inferior to that of *Sinbad* and the picture went way over budget. Many dollars were spent on a matting technique that failed. It lacked that cohesive, singular vision of a technical creator.

The end result of all this intensive effort was something garish and grotesque. Ironically, the more interesting cel-animated effects produced by a team of freelance Disney artists were not even planned, and evolved as a "save-all" to disguise a major screwup in the live action photography. Small's lofty expectations for the film were ultimately extinguished, to the point where he never wanted to hear the word "animation" again. Further, the picture fell prey to a court battle that was never resolved. If you *have* seen *Jack the Giant Killer* in recent years, you've been lucky.

The bizarre saga behind *Jack* had its roots in the mid-fifties, at a time when Ray Harryhausen was trying to get *Sinbad* rolling in Hollywood. Prior to his partnership with Charles Schneer, Harryhausen prepared an outline and several key drawings illustrating the dramatic verve of what was to become *The 7th Voyage*. One producer he tried to interest was Edward Small.

"I remember taking my outline and drawings to Small's office," Ray revealed, "but I couldn't even get past Small's secretary! I never met the man and no one ever returned my phone calls. It was a discouraging experience, to say the least, I finally filed it, like several other ideas, under 'story possibilities' and got on with other things."

It's also possible that Ray had presented Schneer with *Sinbad* around that time, but their track record together had not been established. *Sinbad* would be an exotic project—Schneer was more interested in making inexpensive black-and-white pictures for Columbia. Uniting his ability to attract exhibitors with Harryhausen's technical virtuosity, they devised a system whereby superior-looking science fiction films were brought in for very little money, reaping decent returns at the box office.

Three pictures and "20 million miles" later, *The 7th Voyage of Sinbad* became a reality using backgrounds shot in Spain, blue screen stages in London, and glorious Technicolor. It premiered in New York during the frigid winter of 1958 in the middle of a newspaper strike, prompting Columbia to concoct an unforgettable blitz of TV advertising. The picture took off like a rocket and was hailed by *Variety* as the sleeper of the year. Reportedly, Schneer and Harryhausen brought it in for half a million dollars.

Edward Small had egg on his face when this happened. He undoubtedly remembered the name "Ray Harryhausen" and the barrage of unanswered phone calls several years back. Obviously, he had missed the boat.

The thing is, Small was no schlock producer and had considerable clout in Hollywood. In 1957, he financed Billy Wilder's *Witness for the Prosecution*, a remarkable courtroom drama with a picture-stealing performance by Charles Laughton as a wily defense counsel and a cunning portrayal by Marlene Dietrich. Critical acclaim notwithstanding, the film didn't sweep the box office as Small had hoped. But *Sinbad* did. Swashbucklers were nothing new to Small, having made *The Man in the Iron Mask* and *The Corsican Brothers* in the forties. A special effects children's film was a bit out of his ballpark, but the very thought of having passed on Harryhausen must have irked him.

Determined to cash in on a missed opportunity, Edward Small contacted Nathan "Jerry" Juran, a seasoned art director-turned-live-action-director with an Oscar to his credit (*How Green Was My Valley*, 1941) whom Charles Schneer had hired to megaphone *The 7th Voyage*. Small teamed Juran with screenwriter Or-

ville Hampton and asked him to adapt a monster-laden fairy tale which could easily house Harryhausen's techniques. Naturally Juran would direct.

They decided on "Jack the Giant Killer" from the Welsh and early English legends, replete with ogres, an evil sorcerer, and a sword-wielding hero, which Hampton wrote with deliberate nods to Ray's *Sinbad*. Juran proceeded on the screenplay with Hampton and Small saw nothing but dollar signs. *Jack* would be more opulent, more sensational than *The 7th Voyage of Sinbad* and would reap even healthier profits. So he thought.

Small needed a director of photography, one who had experience in trick work. Jerry Juran recommended David S. Horsley, the former head of Universal's special effects department, who had been freelancing ever since he left the studio after *This Island Earth*.

Said Horsley, "Small called me into a meeting in the fall of 1959 and I agreed to do the picture for him. At the time, it was with the understanding that all optical and miniature work for *Jack the Giant Killer* would be done at Paramount under John Fulton's supervision. Small had that deal all set up; that was his intention. And so on that basis, we had a handshake agreement that I would do the show and report to go on salary as soon as the script was finalized.

"About a month later, Small called me and told me that they were going to postpone the making of the picture for six months. And that he would like to renew the agreement if I was available, or if I could become available. So, I agreed and that's the way it went."

On January 1, 1960, Horsley got a call from C.B. Wood, who had been in charge of the construction of Disneyland and was the key developer of Freedomland Amusement Park in the Bronx, New York. He asked Horsley to design a group of cameras that could take 360-degree pictures, eight of them shooting 45 degrees apart with anamorphic lenses. The idea was to fly it around the world beneath a plane or a helicopter and secure background plates which would be used at Freedomland.

Small agreed to give Horsley a six-month release. With the $37,500 camera part machined, he flew it over key cities in South America. Around the world was out, though—he could never complete that assignment in time for the *Jack the Giant Killer* shoot in July.

"In the meantime," said Horsley, "Small's production manager was bugging my wife every other night on the phone, trying to psyche her into scaring me to come back from South America! I had to waste a lot of money on long distance calls to let them know on certain terms that I would not be there until my six months was up and not a day before." Apparently, Horsley was having the time of his life in Brazil, and returning to California for Small's picture did not seem very appealing.

An elaborate set was built on a stage at Goldwyn Studios for *Jack*.

In July, Horsley discovered that Edward Small had concluded an agreement with Howard Anderson, an independent trick fellow, to do the effects for *Jack the Giant Killer*. John Fulton was no longer in it—the work would not be done on the Paramount lot. The new deal was no surprise to anyone, as Anderson had been supply-

The crew shoots a scene with Sigurd's small boat in July 1960. The barge is in the background.

Phil Kellison mans second camera on a barge off Catalina Island.

ing and servicing Small with matte shots throughout the forties. Anderson, in turn, subcontracted the services of Project Unlimited, whose sole responsibility was to provide the miniatures, props, and animation puppets.

It's interesting to speculate on how Paramount would have handled it. John Fulton was gung ho on blue screen composites and, assuming that he was no more privy to the particulars of Dynamation than anyone else in Hollywood, probably would have ordered the stop-motion to be shot against blue. *Jack the Giant Killer* might have looked very different from *The 7th Voyage of Sinbad* technically. Even Project Unlimited courted the notion of matting the puppets onto live action backgrounds and did so for several shots.

The Production

Small decided to stage the outdoor scenes on Catalina Island and the Isthmus of Avalon off the coast of California. He rented an army barge 150 feet long and docked it off Catalina. It housed the ship sets, the generators, and the entire production crew for an operation that went through most of July 1960 and ended during the first week in August.

The actual photography at Catalina took 15 days. A week was spent shooting interiors built on two stages at the Goldwyn Studio, and another week at Universal for the castle exteriors using standing sets on the back lot.

For his camera operator, Stan Horsley chose Phil Kellison, who had been freelancing as an optical technician for Jack Rabin and Howard Anderson. (See CINEMAGIC issues 31 and 32 for an examination of Kellison's career) They first met at the Fred Ziv Studio, which in the fifties was the hotbed for low budget television shows. Ziv had started a series called *World of Giants*, the brain-child of science-fiction producer William Alland, which starred Marshall Thompson as an eight-inch FBI man carried around in briefcase. Rabin was contracted to do the special effects for 13 episodes at the rate of one a week. But the effects got out of hand—Ziv wanted more than Rabin was prepared to do.

In short order, Alland brought in Stan Horsley to take charge of the operation. Kellison was intrigued (and often perplexed) by Horsley, who usually spoke in terms of logarithms and gamma ratios. Nonetheless, a friendship knit. When *Jack the Giant Killer* evolved, Kellison couldn't have been happier shooting second camera on the live action in the crisp, clean air of Catalina. His background in stop-motion effects would also be a great asset when it came time to put the magic on the screen. It was still a Howard Anderson show, and Kellison was very much part of that company. The effects stage at Cascade Pictures would not be in full swing for another year, and the Pillsbury Doughboy would not be popping out of the oven until 1963.

All the while, Edward Small had his own anxieties on the back burner. He suspected that *Jack* would cost far more than the estimated budget. But his main concern was what he didn't have, and clearly what *The 7th Voyage of Sinbad* did have—a singular guiding force which would prevent the picture from veering off course. Ray Harryhausen was peculiar to Hollywood filmmaking, and Small knew it. He learned from Jerry Juran how well-oiled the *Sinbad* operation was, how Harryhausen and Schneer had managed

The miniature of Pendragon's castle is filmed on location at Catalina. This same miniature was used for the destruction sequence.

to maximize their assets from start to finish. Ray was a genius, technically and financially. Now, *Jack the Giant Killer* would be divided between two effects camps with no technical visionary cracking the whip. He thought of Stan Horsley, who promptly declined.

"I didn't get involved in the trick phase for this reason," Horsley winced. "I knew that Howard Anderson had underbid Fulton's department at Paramount by quite a large sum of money. This was Anderson's way of working, and it was only a question of time before he would run out of dough and he would have to renegotiate. This happened four or five times, and they wound up spending a lot more than the price Fulton had given them in the first place. Had John taken the picture, it probably would have come in on that figure, and no more than that.

"I was particularly sensitive to cost overruns, because I had gotten in trouble at Universal on several occasions. With one picture, *City Beneath the Sea* (1953), the script was about 45 pages when we came up with a flash budget. When the final shooting script came in, we had something like 115 pages describing this earthquake under the sea, and long sequences shot dry for wet with foreground mattes. It more than doubled the amount of work, yet the front office wanted to hold us to the flash figure. Which, of course, was utterly impossible! So I had to go ahead with the production manager's approval and spend whatever it took to get the pictured finished. Afterward, it looked very bad on the books and the overrun was charged to my department. I wasn't about to get into that kind of position a second time. So I backed away from the effects end of *Jack the Giant Killer* as much as I could."

When the production closed, Horsley went off payroll and Howard Anderson took over. Retained by Anderson was Horsley's right hand man, Wes Thompson, who later became head of production at Universal. "I left Wes with Howard to coordinate things. Wes had all the notes, all the protractor readings, and everything he would need to scale the live action plates to the puppet work at Project Unlimited."

Cameras Roll, Heads Roll

On a balmy day in mid-July, cast and crew assembled on the barge for the first day of shooting. There was Kerwin Mathews, fresh from *Sinbad* and *Gulliver*, who by now was an expert at lancing creatures he could not see. Torin Thatcher was on board as the evil sorcerer Pendagron, a steal from the Sokurah role penned by Harryhausen and screenwriter Kenneth Kolb. A new girl, Judi Meredith (Frank Sinatra's girlfriend at that time), was cast as Princess Elaine. (Apparently, Edward Small could not get Kathryn Crosby.) Even the young genie in *Sinbad* played by Richard Eyer had a counterpart in *Jack*.

David S. Horsley (seated in plane with camera) prepares to film an aerial sequence with Paul Mantz, pilot. Mechanical engineer Wes Thompson is standing beside the aircraft.

The location photography was anything but smooth sailing. Small, Juran and Horsley rarely saw eye to eye. On one particular day, Horsley was so irked by Juran, he almost threw him off a 20-foot parallel looming over the barge!

Technically, one of the problems stemmed from Edward Small's plan to release *Jack the Giant Killer* to theaters *and* television. With that in mind, he instructed Stan Horsley to light the scenes so the film would be as tolerable to television as it would be to the movie screen.

According to Phil Kellison, "Stan's *theory* was that the contrast ratio of the photography had to be compressed within a very low scale. The tolerance to TV was not as good as it is now. This caused him to 'fill' his photography so strongly, it took on a very flat look. Stan was just *full* of theories."

Horsley threw an absolute fit at Pendragon's costume. "It had black and white vertical stripes with pearls in them. Stan felt the black & white pattern was so far out of the range of contrast that the camera could pull for television, he felt obligated to use all the fill light he could! It was very lackluster; he was lighting for what he thought were the limits of television. On top of that, he was *framing* for Television. TV cutoff was far worse then than it is now, so he was composing for a little frame in a big picture. The little frame was what he was concentrating on! So, some of those compositions are most peculiar. These were his *own* restrictions."

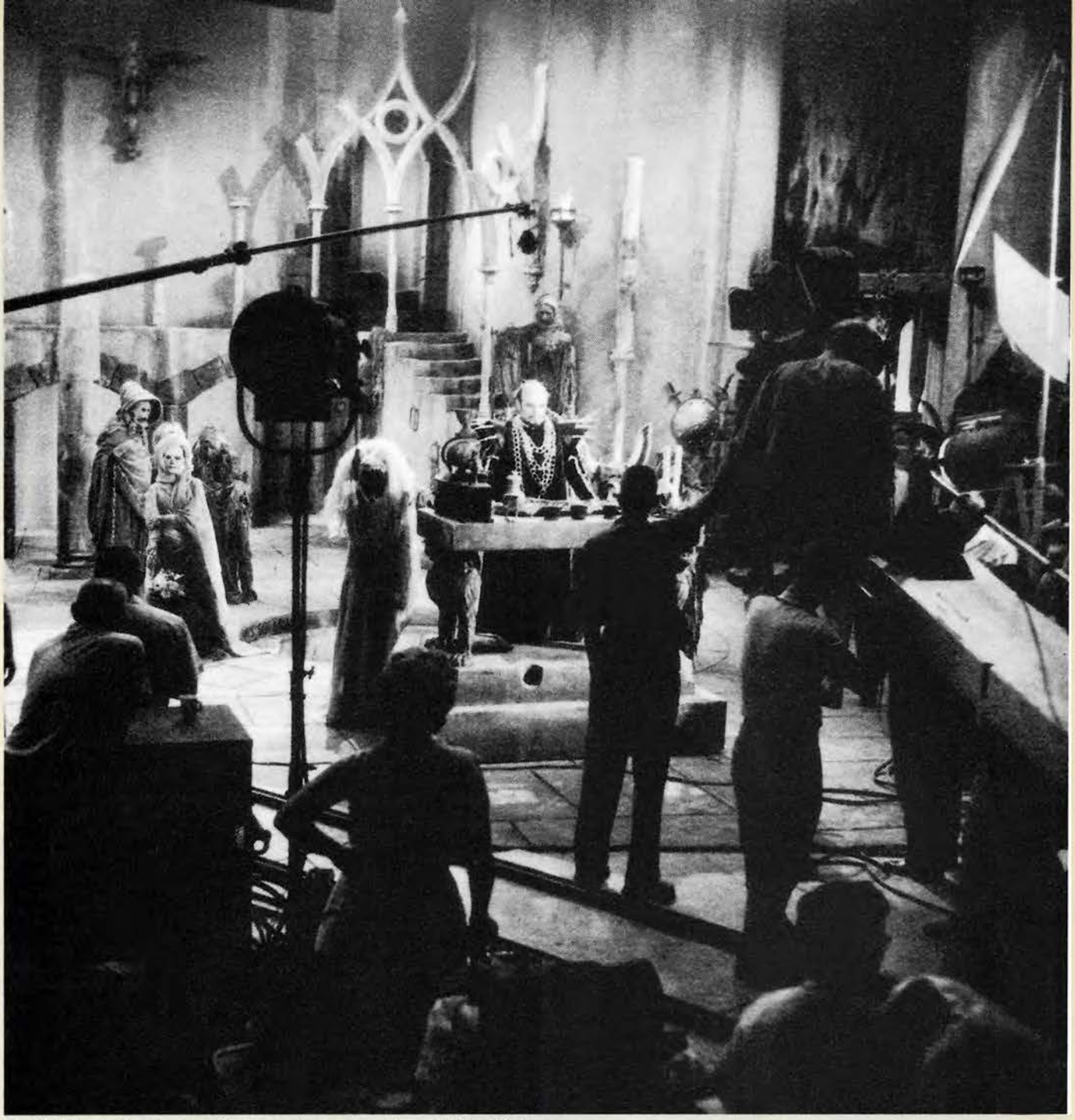
Horsley lit the rest of the stage material the same way, destroying much of the atmosphere that director Juran was seeking. "Pendragon's castle was supposed to be a grim, dark, foreboding place. Stan would not allow the contrast level to go down to make this castle *look* grim and foreboding. It looked more like a nicely-lit dance hall with all these creatures hanging around. It lost all the mood.

"There was so little known about films for television at that time," Kellison points out. "It wasn't entirely Stan's fault. Thing is, I'm not sure if it could have even been shown on television *when* he shot it—he may have been thinking of the future. There was no low-contrast stock. What Stan was doing was the things you *shouldn't* do, which was compromising for 'film for theater' and 'film for television.' As it turned out, he didn't do either medium any good."

Ghosts on the Loose

There were other catastrophes. Originally, there were ghosts permeating the picture. Each had a specific name, dressed in tattered costumes and grotesque masks built by Charles Gemora, the famous Hollywood prop man. There was a wind witch, a water witch, and each had an important part in the film. There was even a *prologue* introducing the witches, telling the audience how and why they

A new actress, Judi Meredith, (Frank Sinatra's girlfriend at the time) was cast as Princess Elaine. Lady Constantine was played by Anna Lee.



Torin Thatcher as the evil sorceror Pendragon rehearses on a stage at Goldwyn Studios.

were present. The intention was to double-expose them into the live action. Phil Kellison recalled the grim scenario.

"After the location work had been shot, we prepared the Goldwyn stage for the first 'ghost' scene. Of course, the actors' scenes were locked off. On a separate take, the ghosts would be shot against black in a matching situation. There could not be any camera movement; we didn't have motion control in those days. You blackened the set with velvet so the ghosts could go around the furniture, and the ghosts would be optically double exposed.

"They were ready to make the first setup when Jerry Juran got into a *screaming* fit with Stan Horsley! Juran wouldn't allow the camera to be locked off. He wanted a *moving* camera. Of course, this immediately ruins the whole effect of the ghosts being double-exposed. Jerry wouldn't give in, and Eddie Small apparently backed Jerry. Stan threw his hands up in the air! 'OK, moving camera. The ghosts will have to be in there with 'em.' So there were all these characters roaming around, lit to full intensity, in burlap costumes with masks and visible eyeholes."

A lot of footage was shot. Apparently Edward Small wasn't watching the dailies. "When he finally saw the scenes of these 'ghosts' running around the set with the regular actors, he went through the ceiling! There was *hell* to pay! But the money had already been spent. Small wouldn't go back and reshoot those scenes and double in the ghosts as planned. So the decision was, 'OK, we'll *cut out* as many of the ghost scenes as we can.'

"Unfortunately, the ghosts were next to the principal actors half the time. And if you watch *Jack the Giant Killer* carefully, you'll see this strange creature behind Kerwin Mathews, but only for *that cut*. Then, he would be gone! They removed everything they could get rid of, but they had to salvage the scenes that were pertinent to the story."

The upshot of this chaos was the complete deletion of the prologue, leaving only the ghosts that menace the ship. Problem was, they didn't look like ghosts but

more like refugees from a bad masquerade ball. Edward Small had run out of Maalox and implored Howard Anderson to do something about this optically. So a decision was made to camouflage the costumes with cartoon-animated enhancements.

A new unit was formed at Anderson's composed of reputable Disney artists, adding over $50,000 to the budget. Gary Crandall was in charge of opticals. Every ghost image was rotoscoped, effects-animated, solarized, and printed in colors which were out of register. Hundreds of man hours were spent creating overlays of hand-animated sparkles. *Anything* to disguise them which, with typical Hollywood irony, turned out to be the most interesting effects in the whole picture.

Boyd Vaughn spearheaded this unit along with his brother Lloyd, who eventually got screen credit. Others included Disney animators Dan MacManus, and Nancy Van Raenseller. Jim Danforth remembered her well.

"Nancy was an ex-Disney roto girl who went into the effects business. She worked at a . .r facility. She used to do mattes directly on film, painting right on celluloid whenever a traveling matte was imperfect or something had to be covered up. For example, there were wires holding up the skeletons on Pendragon's drawbridge. Nancy would draw hairline mattes and they would burn in a piece of vacant background.

"Phil Kellison did the effect of Pendragon's cloak appearing and disappearing with roto mattes. Then, Nancy was set up with Phil's Bell & Howell camera and did all the witches's mattes. She also did the roto material for the Vaughns and Dan MacManus, as when the captain gets zapped by the witches and he's on fire as he falls. She would make a precise outline of the actor which would go to the effects animators, and they would draw flames into it. She was tremendous."

If the ghosts weren't enough, a major mishap occurred during the filming of Pendragon's castle. One can only appreciate Ray Harryhausen's work even more, as every effect in his films had been pre-planned and built precisely to Ray's specifications, be it large-scale miniature work or actual stop-motion. If something *did* go wrong, it was probably attributable to the uncontrollable laws of physics. Not so on *Jack the Giant Killer*—with no single-vision creator the technical instability that cropped up was inevitable.

Pendragon's castle was built as a hanging miniature in the prop shop at Project Unlimited. Transported to Catalina Island, it was mounted near the camera, aligned with the natural terrain, and photographed in bright sunlight along with actors performing in the distance. Moreover, the camera could pan around it. The technique was old and ingenious, eliminating the need for composite work. Nothing looks better than the real thing. But a situation in the script was grossly overlooked.

"The castle was brought back from location and put in storage," Kellison explains. "It was quite big for a miniature, about ten feet high. Then, somebody realized that the end of the script had a passage that read: 'Jack looks back and watches Pendragon's castle collapse into the sea.' Nobody had made any provisions for that whatsoever!

"At that point, Louis MacManus, who was one of the partners at Anderson, said 'Don't worry. We'll just give the impression of it. We'll dump some fragments of the castle upside down in a tank.'

"Edward Small wouldn't buy that idea at all! What we had to do was take the castle, which was built solid, and prepare it as a breakaway. It was somewhat cut up and put back together. They did make a couple of large-scale arches, which were made specifically to collapse. Then, Augie Lohman, a mechanical effects expert, was hired to make them disintegrate. We matted it against blue or black, so we could put a real sky behind it. Small's warning, however, was that the castle was to disintegrate—*not* to explode.

"First time around, Augie put Primacord in it. It didn't disintegrate; it exploded. Now, this was a one-of-a-kind castle! So, they had to rebuild the entire thing again. And the second time around, it *still* looked like an explosion. But we were stuck with it. Ironically, had the castle been *planned* as a breakaway, we would have avoided the agony of hauling a ten-foot solid structure to Catalina Island."

Gearing Up For Stop-Motion

Project Unlimited was owned and operated by Gene Warren, Tim Baar and Wah Chang, with a group of model makers, animators, and a matte painter under their roof. George Pal had used their services for a number of pictures (Warren and Chang were alumni of Pal's *Puppetoons* and Project had recently completed the Oscar-winning effects for *The Time Machine*). The facility on Sunset Boulevard near Vermont Avenue was small and cramped but self-contained and competently run. Dwarfed by the major studios, Project Unlimited operated on lean budgets and came up with trick work that, for its day, was quite good. Howard Anderson had no qualms about subcontracting them for *Jack the Giant Killer*.

Originally, though, it was Anderson's intention to form his *own* unit to do the stop-motion effects. When Edward Small approached him to do *Jack*, Anderson happened to be on the RKO lot and discovered the original *King Kong* puppets which had been lying in RKO's prop room, rotting rubber and all. The Kong armatures had in fact been stripped and redressed for *Son of Kong* in 1934. No one had touched them since.

Considering this find a real *coup*, Howard Anderson, his production designer Louis MacManus, and Phil Kellison decided to rebuild the puppets. MacManus designed new characters to fit the armatures, which is one reason why the monsters in *Jack the Giant Killer* resembled splayed giants.

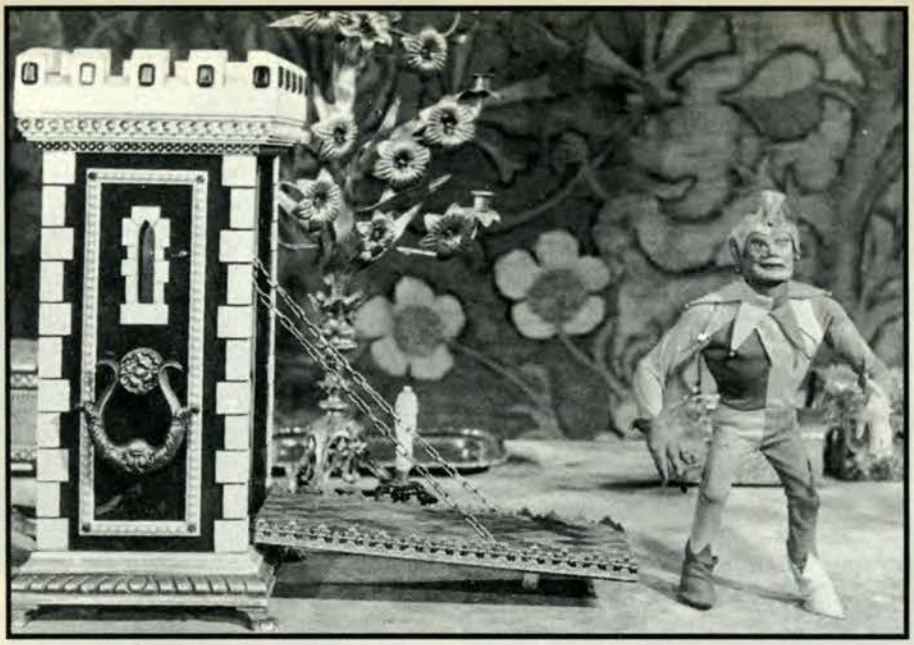
Kellison examins one of the Cunningham process projectors, which were built for *Mighty Joe Young*. They were revamped for color by Wes Thompson.

Kellison stripped the two Kong puppets clean, discarding the morbid exteriors. To tamper with them might have seemed unholy, but to Kellison, who had worked with Willis O'Brien, they were kindred spirits. But much to his chagrin, he found that the armatures were too antique. The machine work had been crude and most of the parts were worn.

After that, Anderson's thinking changed. He had been myopic. He realized it would require quite a setup to start from scratch to do all the work that was planned. His stock in trade had always been photographic effects, not machine work, and the prospect of combing Hollywood for competent animators seemed unrealistic and time-consuming.

The idea *then* was to farm out the puppet construction and stop-motion chores to Project Unlimited. The company was already set up to accomplish this. Phil Kellison, who had been "drafted" by Gene Warren on several films (including *Dinosaurus* in which he animated the climactic steam shovel sequence with Dave Pal), was appointed by Anderson to take charge of the stop-motion photography.

Since the Kong armatures were unusable, Gene Warren decided that his crew would build new ones. Curiously, at this point, they *could* have made more interesting monsters, liberated of the cumbersome anatomy that MacManus had been locked into. But instead, they stuck to the original designs. The problem was getting Edward Small to OK *anything*. The prototypes had already been approved. As far as Small was concerned, that was the end of that. The situation would soon change.



The court jester (Cormoran in disguise) emerges from his music box. This sequence was filmed on October 5, 1960.

Marcel Delgado worked on the new armatures at Project with his brother Victor. "The strange thing about the Delgados and the company," Kellison remarked, "was that Victor was in charge of the shop. Marcel worked for Victor. I didn't even know Marcel was important! I had always thought that it was *Victor* that had done the *Kong* armatures. But I realized that he was too young. Marcel's English was sluggish and he was very retiring. Gene hired Vic to run the shop, who pushed Marcel back and shoved him under the rug. Victor was very upfront."

Sculptural Anomalies

Also at Project Unlimited from time to time was an ambitious, teenaged artist named Jim Danforth. He had apprenticed at Art Clokey Films for a year doing TV commercials and an animated rabbit for *The Dinah Shore Show*, then shuttled over to Project for a few weeks to work on *The Time Machine*. He assisted in a general way, changing slides for the background projector and setting up dolly shots. After that, Danforth went back to Clokey's for six months to co-animate *Davey & Goliath*. An offer brought him back to Project Unlimited. At age 20, he became a full-time Project employee.

His first job there was stop-framing a dragon for AIP's *Goliath & The Dragon*. "It was originally intended as a very elaborate film," Danforth recalled, "a sort of Hercules-styled Greek mythology adventure. But the plans went awry and they ended up purchasing an Italian strongman film and inserting the dragon sequence into it. So, we at Project built the dragon and animated about half a dozen scenes that they just cut into it. A strange sort of mishmash, but AIP liked it."

For *Master of the World*, Danforth built tiny human figures for long shots of an airborne ship. He then proceeded to work on *Jack the Giant Killer*.

"They were looking for someone to build the models. I had in fact submitted estimates on sculpting the puppets and doing the hair and taxidermy work. This was during the time Anderson was planning to rework the *King Kong* puppets. I was to do the sculpture in this hypothetical situation. Rubber casts were to be made by Don Post Studios, and I would fabricate them back over the armatures, paint them, put in eyes, and so forth.

"I went through quite a lot of work. I sculpted a prototype of the two-headed giant and did a lot of technical drawings and breakdowns. But they were never submitted. Before I ever got to turn them in, they asked me for a figure and I quoted them something like $3,000 to do all the puppets. They never commented on it and I just didn't get the job. When Project Unlimited got the entire bid to build the puppets and miniatures, I wound up working on it anyway."

As it turned out, Wah Chang sculpted the creatures for *Jack the Giant Killer* based on Louis MacManus' sketches. The bizarre menagerie included Cormoran (a poor man's Cyclops), a two-headed giant called Galligantua, a sea monster, and a harpy. Though their physiognomies looked conspicuously Oriental, reminiscent of classical Chinese festival masks, Chang did not design them—MacManus had drawn them that way. Marcel Delgado had originally sculpted the two-headed giant using his build-up method, but for reasons that were suspected to have been political, the job was given to Chang. "The person who revamped it thought he could improve it," Delgado lamented, "but in my estimation, it was ruined."

One can only sympathize with Delgado. The puppets were garish monstrosities. The skins lacked detail and the musculature looked like parodies of Ray Harryhausen's work. Chang may have been a Puppetoon master, but in *Jack*, something went awry. For Jim Danforth who eventually had to animate them, it was a nightmare.

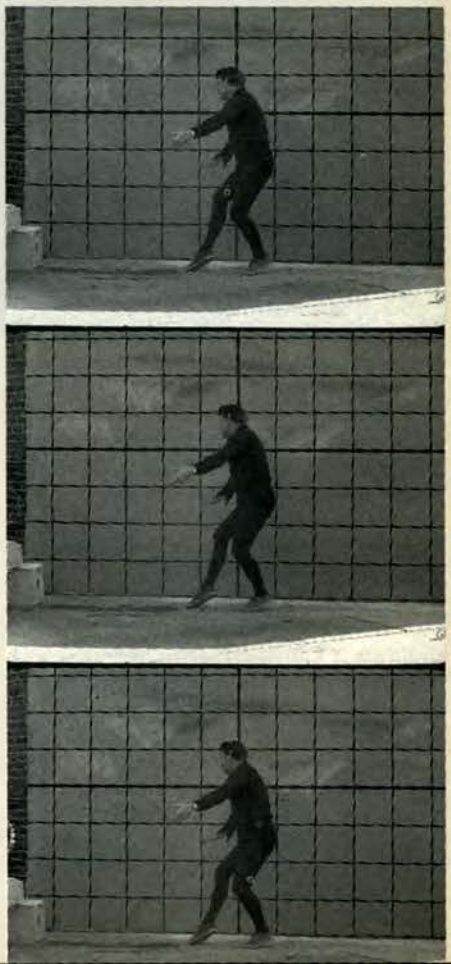
"The puppets were horrendous. And it's quite difficult to animate figures when you don't find them aesthetically pleasing. Especially when you have to look at them with intense concentration, day after day. I did build some of the secondary characters, though. I built a small chimpanzee model which I don't think actually appeared in the film, and a dog, which was in the film. Also some miniature people. I don't think any of these were used, either. I had *nothing* to do with those monsters!"

The sea monster may have been the worst of the bunch. With six tentacles, a sneering grin, and a receding forehead, it was impossible to wrench any terror out of it. Three versions were done. The first was used during the initial animation test but looked bad in the dailies and was promptly rejected.

The second was sculpted by Danforth in Plastiline but never went past that stage. The third, done by Wah Chang, was used in the film. Apparently, Small threw his hands in the air and let it ride.

Process vs. Infrared

Another major find at RKO were the stop-motion projectors that had been built by Harry Cunningham for *Mighty Joe Young*. Miniature rear projection was an



on-going consideration for *Jack the Giant Killer* and the prospect of obtaining these machines was exciting. Project Unlimited did not have exceptional process projectors in-house. On *Dinosaurus*, they used an old Acme projector and did a number of miniature process shots which were very poor. Rear projection was also used in *Master of the World*, but those facilities were brought in by an independent process man, Bill Hansard. Therefore, as part of the deal, Anderson bought three of the Cunningham projectors and had them re-assembled on Stage Two at Project Unlimited.

The machines were magnificent, built to last forever. Each looked very much like a big breadbox. They were driven by ½ horsepower motors with four rocker arms and a telescopic shaft. The motor could be set in the stop-motion mode or a real-time mode. A foot pedal allowed frames to be clicked of from the camera's vantage point.

Because they were built for black & white film, they had to be reworked for color. Wes Thompson accomplished this by improving the mercury relay switches so they would not wear out. 3200 K bulbs replaced the old ones. He also installed water jackets on the projectors. There was an input and output—cold water came in, removed a considerable amount of heat, and exited down a drain.

Thompson's overhaul was superb. He later sold one machine to Ray Harryhausen who has been using it ever since.

Yet, early in the game, Anderson and Kellison were considering an infrared travelling matte process for compositing the puppet animation with the background plates. Unlike Harryhausen's Dynamation process, the models would be matted into the scene.

"Cascade Pictures had an exclusive patent on it," Kellison explained. "It was an excellent system. It used a Technicolor camera which was antique by that time, but it made beautiful mattes. It had the best lack of matte lines of any system because you were using two films in the same camera—one to record the animation and another to record the matte—and they were ultra-perfect. One of the problems with ordinary matting is that you're inadvertently shrinking or expanding the matte as you're developing. The infrared light focused .007 of an inch further back on regular color film and *compensated* for that shrinkage automatically.

"Still, it was unpredictable for the work in *Jack the Giant Killer*. The lenses on the Technicolor camera were very old and difficult to shoot miniatures with. And the camera was a *bear* of a box. But we did our first test using that technique."

Don Sahlin and Tom Holland animated that first test, of the two-headed giant and the sea monster in combat. Project Unlimited had elected to put one animator on each of the characters. The sea beast had many tentacles, and it was soon discovered that two people couldn't do two creatures that intertwined. One animator would move in to strike, the other would move away, and the models would never make contact.

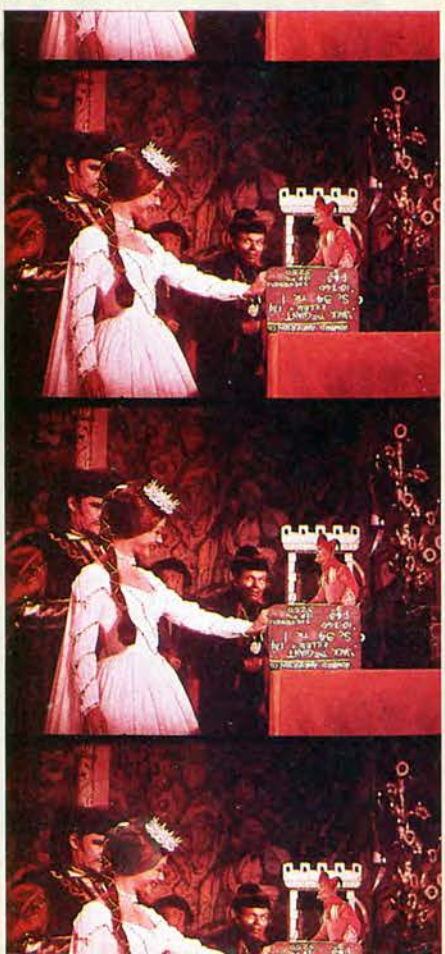
"The infrared test was pretty bad," Kellison laments. "Cascade provided the 3-strip Technicolor camera. They also provided Harry Young, their alleged infrared expert. He knew how to operate the Technicolor camera but didn't seem to know much about infrared! Roy Seawright was the old-time expert at Cascade but didn't want to bother with this test. Young didn't even know how to take light readings. So, the test came out looking less than satisfactory, plus it took forever to get it done."

Edward Small saw the test and wouldn't buy it. The matte densities were way off and the animation was poor. At that point, process projection was in and infrared went the way of the dinosaur. Don Sahlin left for New York and eventually became Jim Henson's chief Muppet creator. Jim Danforth redid the fight between Galligantua and the sea monster all by himself, with a miniature dog in between to boot. Tom Holland stayed on and did his share of animation with Dave Pal, but it became evident to all concerned that Jim's footage was far superior to the others.

On Meeting Harryhausen

It was a heady experience for young Danforth, meeting Ray Harryhausen at his studio during *The 7th Voyage of Sinbad*. "It

In the black and white clip at far left, animator Tom Holland dances in front of a reference grid. The next clip is the live action set-up, followed by the front-light/back-light animation and the final composite.



It was extremely crowded at the old Project Unlimited studio on Sunset and Vermont in Hollywood. Jim Danforth in silhouette animates a Dynamation shot, while Tom Holland in the background does the same. The projector beams are practically criss-crossed.

totally blew my mind. And like all young people, the experience wasn't enough. I had to do something about it."

It happened on a Saturday afternoon. Ray had just finished with Dolph Sharp and William Woodfield, the author and photographer of the classic Harryhausen piece in *Argosy* magazine. "Ray put me off for several weeks. I would call him on the phone and he'd say, 'I'm under a lot of pressure right now, would you please call back some other time.' He *was* immersed in the animation for *Sinbad*. After a while, I felt that I had been doing something very wrong, like asking to watch the King and Queen eat breakfast.

"When I finally came over that Saturday, Ray was utterly delightful! Apparently, he and Schneer were running dailies on Fridays and he finally had time to invite guests over.

"Of course, I was enthralled by what I saw! He had just finished animating the baby Roc. There was the pedestal with the miniature egg strapped to it. He was about to cast the Serpent Woman, which I believe was the last thing he did. He was very warm and open and responsive to my interests."

Danforth was so inspired, he decided to do his own advertising drawings for *Sinbad*. "When you're a kid, anything's possible." Charles Schneer was at the Columbia Ranch shooting *Gunman's Walk* and he consented to talk to the young animator on the set. At Schneer's suggestion, he sent his drawings to Jonas Rosenfeld Jr., then head of Columbia's publicity department in New York.

Jim based the drawings on what he had seen at Ray's shop. Nothing ever became of those drawings, but something very real came out of his visit with Harryhausen. He had seen Ray's Dynamation setups, and although Ray couldn't explain *everything* to Danforth, it was enough to get him going on his own experiments. Very carefully, he studied stills from *It Came from Beneath the Sea* and *20 Million Miles to Earth* and chipped away at Dynamation, to the point where he felt comfortable in applying it to a professional film. It finally happened on *Jack the Giant Killer*.

Recalled Phil Kellison: "Jim had brought in a test reel. It was done in his garage and it was some of the *nicest* stuff I had ever seen! Two knights, fighting on the edge of a cliff. The figures were very small, perhaps eight inches tall. When Howard Anderson started planning the stop-motion unit for *Jack*, I thought that we would hire Jim Danforth to work for us. Then, it went through Project Unlimited.

"Gene Warren had interviewed Jim at one time. Jim, who was a rather positive young man, had antagonized Gene in some way. So Gene had his reservations about putting him on. I knew he had already freelanced at Project on several occasions. I don't recall exactly how it went with Howard, but I strongly recommended that we put Jim Danforth on *Jack the Giant Killer*."

Jim elaborated. "I was a kid. Nobody knew who I was. I was hired by Tim Baar (against Gene's and Wah's wishes, or so I'm told) and was involved almost from the beginning of the effects shoot. I inherited the hard scenes, because the other animators weren't up to the task and because the associate producer, Bob Kent, sent a letter instructing that only *Jim Danforth* do the fight scenes, because the other animators were 'wearing out the puppets.'

"In fact, when I was assigned to the project, I was told that if anyone visited from the Edward Small Co. I was to stop shooting and say that I was only *assisting* Tom Holland. This was so that Project Unlimited wouldn't lose face for hiring someone so young. From that, to Bob Kent's letter eight month's later! Ironic, I'd say."

Dynamation, You Say?

Part of the problem was Danforth's total awareness of the ingenuity and relative simplicity of Harryhausen's technique, and the ignorance of some of the Establishment figures in that respect. To be put on a major effects picture and know just what to do was one thing; to be scoffed at for being an "impetuous rebel" was another. He was amazed at the cavalier attitude some of the Project Unlimited figureheads had toward Ray's pictures, which Danforth found quite galling. *Jack the Giant Killer* was supposed to be a copycat of *The 7th Voyage of Sinbad*. Yet *no one* on that production except Danforth understood what Ray Harryhausen had done. Jerry Juran had directed *Sinbad*, but Ray had apparently kept him in the dark about the specifics of Dynamation. To his embarrassment, Juran could not relate any of Harryhausen's "secrets" to Anderson *or* Small.

"The plan at Project was to use rear projection in concert with *foreground miniatures*," Danforth revealed. "They didn't know how Harryhausen's splits worked. It had never *occurred* to them that they could make a split screen on a process shot. I think they felt that all those floors and foregrounds 'holding up' the Cyclops were *miniatures*. They were going to reproduce every foreground piece as a miniature set.

"Tim Baar, who had been in the business for a long time, complained about the producer wanting the monster to go behind the wall in the process plate. As Tim saw it, we would have to build a miniature wall. I said 'Tim, slow down, there's a way to do that!' He didn't get it. Two months later, they're still trying to build these miniatures. Had that gone on, we would've been working on the movie a year longer than we had. I said 'Look, guys. You don't have to build a miniature cliff everytime the giant has to come from behind it.'

"I brought in all my Harryhausen stills and explained it to them and it just didn't register. I showed them a shot from *The 7th Voyage of Sinbad*, the one of the Roc chick hatching out of the egg. 'What did Ray do,' they asked, 'anchor the egg shell to a piece of glass?' 'No,' I explained, 'it's a *split screen*. You photograph the top part, take the table away, mask the top on glass, and photograph the bottom of the background plate.

"Next thing I knew, someone at Project had a piece of black cardboard nailed to one side of a 2x4, and the other piece to another 2x4 on the other side of the set up. He was taking a razor blade, trying to cut a matte to match the edge of the rear-projected cliff. I came over and showed them how to use glass.

"Phil Kellison tried an experiment putting tape on the glass, then spray-painting the glass and peeling the tape away for a countermatte. But in 35mm, you get a line. It's too exact; you need a gap.

"I convinced them to use process projection solely without the use of foreground miniatures," Danforth asserted. "If I had to take credit for anything in *Jack the Giant Killer*, it would have to be that and nothing else."

The first sequence to use rear projection and opaque glass mattes was that of the mechanical court jester emerging from a music box, which turns out to be the giant Cormoran in diminuitive form.

The final battle of the sea-monster and the two headed giant featured two very crude puppets animated by Jim Danforth. **Inset:** Harryhausen's Cyclops was feebly imitated in *Jack*. This *7th Voyage of Sinbad* creature was sculpted by Harryhausen with taxidermy by George Lofgren.

Pendragon transforms himself into a flying monster (shades of Disney's *Sleeping Beauty*) for the final battle. Danforth animated the harpy by mounting it on a rod that went back to a plexiglass sheet behind the process screen. Filmed on January 30, 1960.

Tom Holland animated it with the assistance of Ralph Rodine. Some scenes used front light/back light mattes in order to make the puppet appear very small relative to the background scene. Unsure of how the figure was supposed to move, Holland had someone film him dancing against a wall grid which he tried to copy frame by frame.

"He also had a most peculiar animation technique," Kellison mused. "Instead of using surface gauges and imagination to make this thing move, he would set up an 8x10 camera near the taking camera, and he would *draw* the creature in this position on the groundglass, Then, he would move it a bit and use the drawn outline as a reference. This worked well for him, but it was so time-consuming! He also discovered that as he animated the character, it would veer off its axis. He would then set up *two* 8x10 cameras and draw on both groundglasses! The whole sequence was shot that way. Despite all his calculations, the moves weren't smooth enough. But because the little character was supposed to be an automaton, you could buy it."

Another trick Jim Danforth created for *Jack* was the "animated glass shot" which developed over a dispute with the director. It was probably the most expensive frame by frame animation done at the time. It meant painting part of a rear-projected figure on a single glass sheet, in oils, and scraping it off for the next position. That way, the projected figure of Jack could move in front of the puppet without becoming obscured.

According to Danforth, "The animated glass shot was actually Phil's idea. He wanted it done because I think he was peeved with Jerry Juran, who kept telling Phil what could and couldn't be done in the absolute sense! The shot called for Jack and the girl to run in a particular arc near the gristmill, and they realize that this would take them in *front* of the giant's foot. They didn't want the giant to back out of the scene, make room for them, and come back in.

"As I recall, Juran's solution was to put a miniature wagon in front of the giant's foot. So the inference is there—you see the heads of the rear-projected actors, and you assume that they must have gone in front of the puppet. But the actual point of contact would be masked by the miniature wagon. I guess that made Phil mad, that Juran was trying to work out these problem. So, Phil decided that we would show him a thing or two."

This procedure had actually been done for an earlier shot (a night scene) in which knight was supposed to pass in front of the giant's leg. Dave Pal had animated another cut similar to that. Danforth agreed to follow through with the added trickery.

"Phil had suggested that we line up some miniature helmets on wires in front of the process screen. I believe I said, 'No, let's do it on glass, it would be faster.' When the gristmill shot came about, there was no longer any discussion about model parts; the glass technique had been successful. I worked all night on it. It took me 30 hours to do it."

"My only objection," Kellison countered, "was the time it was taking. To Jim, time meant nothing, as long as he could get the shot. The detail couldn't be beat. Jim was fabulous! Difficult to work with, but fabulous."

A Grueling Ordeal

The stop-motion/process work for *Jack the Giant Killer* became so harrowing, the crew thought it would never end. Project Unlimited had only one work stage. Conditions were so cramped that in several instances, three rear projectors were going simultaneously on the longest throw across the building. The projector beams were literally criss-crossing each other midway!

Another headache was the climactic harpy sequence in which Jack jumps on its back and hacks it to death while airborne. According to Danforth, the sequence was almost scrapped because the people had talked themselves into believing that it couldn't be done. "At one point, Phil said, 'Jim, you've got to shoot the first harpy scene. Don't ask why, just do it.' And I did it. Apparently, they just didn't think it would work."

To accomplish this, Danforth mounted

Pendragon's castle in miniature was filmed against a sky backing and split-screened with foreground water.

the creature on a rod which went back to a big sheet of plexiglass *behind* the process screen. Years earlier, Gene Warren and Wah Chang had built a little frame of plexiglass for a spot called *Suzy Snowflake*. The frame was animated horizontally and vertically while the puppet was attached to the plex, eliminating the need for wire work. For the harpy, Wes Thompson built one on a larger scale.

"I think it was figured out that if we put the process screen on the *front* side of the plex, we wouldn't get any reflections," Danforth explained. "What we had to do was cut a hole in the process screen so the rod could be extended through the screen toward the camera. It worked out well. We only had reflection problems of light bouncing off the wooden frame."

Other harpy shots used alternate-frame front light/back light mattes and "density" mattes to insert the puppet into the backgrounds. All this, to simulate what Ray Harryhausen had achieved with one uniform method.

The real killer was Edward Small's editor, Grant Whytock, who refused to use two cuts of the same angle. In *Sinbad*, Ray had about 100 animation cuts. But he had only made 25 or 30 *setups*. In *Jack*, every setup had to be different, which meant making a different miniature or a different set of matte glasses for every cut!

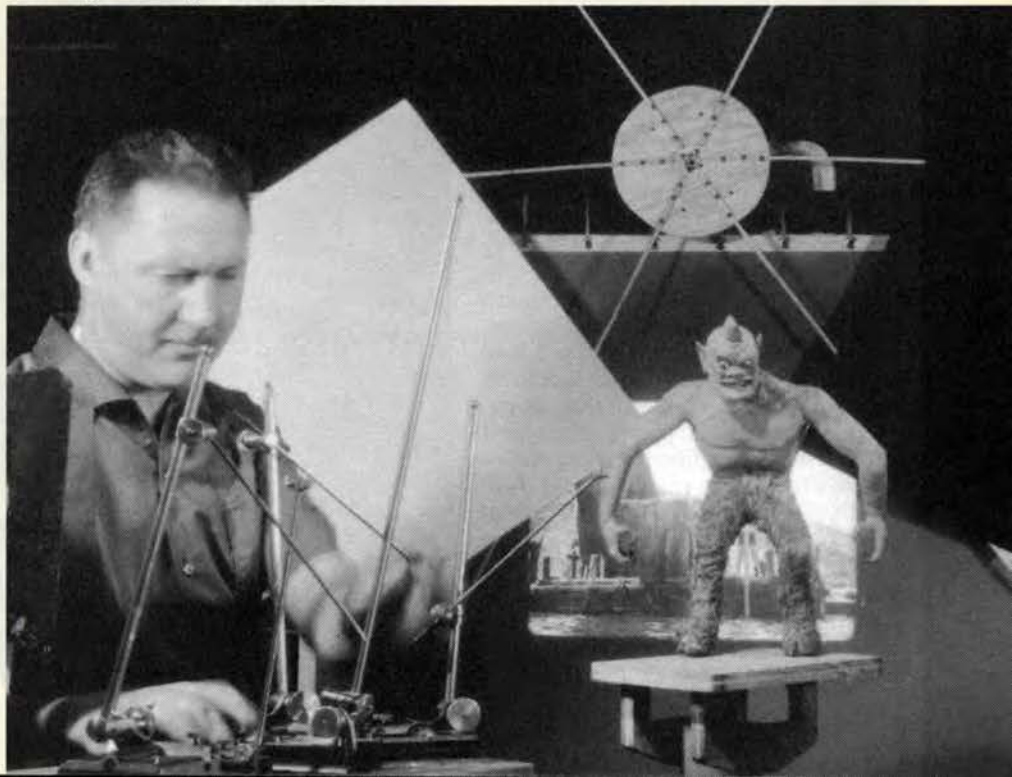
"If I remember rightly," Kellison winced, "we had to do 179 cuts. That was almost twice as much as Ray had. And everyone of ours was a different setup! We had to cut the animation tables in half and re-position the process screens. Some of the stuff was wonderful. We did some great things. But because of Small's attitude and his editor, the picture went *way* over budget, to the point where it could never be a financial success."

The effects for *Jack the Giant Killer* started in September 1960. It didn't let up until July 1961. Ten months of exhausting labor, almost as much as what had been expended on *Mighty Joe Young*.

After its release, the picture underwent a bizarre permutation. Exactly when this happened is not known. Rather than shelve a box office failure, someone at United Artists decided to turn the film into a musical! Most of the original score by Paul Sawtell and Burt Shefter was replaced. Some of Kerwin Mathews' dialogue scenes were reworked on an optical printer, altering his mouth movements to accommodate *songs*. The actor was no doubt astounded to see his lines suddenly transformed into musical serenades to Judi Meredith in someone else's voice! Problem was, any background movement behind him (including water) was automatically speeded up and slowed down as the songs progressed.

Phil Kellison demonstrates the replacement glass plates which animated the effect of sand being tossed into the Cormoran's eyes.

The Cormoran is blinded by sand.



Stop-motion supervisor Phil Kellison poses with the Cormoran puppet and a battery of surface gauges. The circular rig in the background is an aerial brace.

Jim Danforth animates the battle of the sea monster and the two-headed giant.

Phil Kellison with the original *King Kong* puppet, which was stripped down to its armature for *Jack*. The armature was very worn, so a new armature was constructed.

The result of this optical alteration was something that can best be described as charmingly atrocious.

The sad footnote to this entire experience was a lawsuit that tied the film up in court for years. *Jack the Giant Killer* was released by United Artists, but it was owned by Edward Small. According to the prevailing story, Small thought for sure that he was going to have another *Sinbad* on his hands. So did United Artists. For that reason, they wanted to get it away from Small. But Small wouldn't sell it. In order to create a situation, UA refused to publicize it. The picture just dribbled out. They were hoping to make the initial release unremarkable so Small would be persuaded to sell it. With that done, United Artists could pump it up and distribute it with a fanfare. How much truth there is to this scenario is not known.

At any rate, Edward Small took United Artists to court. A fight ensued and the whole affair became embroiled in a lawsuit which was never adjudicated.

Except for its initial roadshow, the film was never distributed. The litigation problems prevailed for years afterward and the movie has all but vanished.

If you have cable TV, you might catch an orphaned print of one of the most eccentric special effects flicks of the sixties. If not, it just might be sitting on a rack at your local video store someday.

It's called *Jack the Giant Killer*. It might come back. But don't hold your breath.

Animator Dave Pal was responsible for 65% of the stop-motion sequences in *Jack*.

The Story

Pendragon, a sorceror, has been banished from Ancient England and with him all giants, vowing to take the throne of Cornwall occupied by King Mark. Disguised as a present to the King's daughter Elaine is a music box from which emerges a miniature court jester. At night, the jester grows into Cormoran, a hideous 20-foot giant, and kidnaps her. Before Cormoran can deliver the princess to Pendragon, a farmer's son named Jack kills the monster with his axe. In gratitude, the King knights the brave lad, who is henceforth known as Jack the Giant Killer.

Jack is entrusted with the task of spiriting Elaine to a convent across the sea where she will be safe until Pendragon can be put out of the way. But the scorceror has bewitched Elaine's lady-in-waiting, who informs her master of the plan.

Pendragon sends witches and ghouls to intercept Jack's ship and Elaine is again kidnapped. Jack and 12-year old Peter are cast overboard and picked up by Sigurd the Viking. Eventually Sigurd fishes up an Imp imprisoned in a bottle, who helps them find Pendragon's uncharted island.

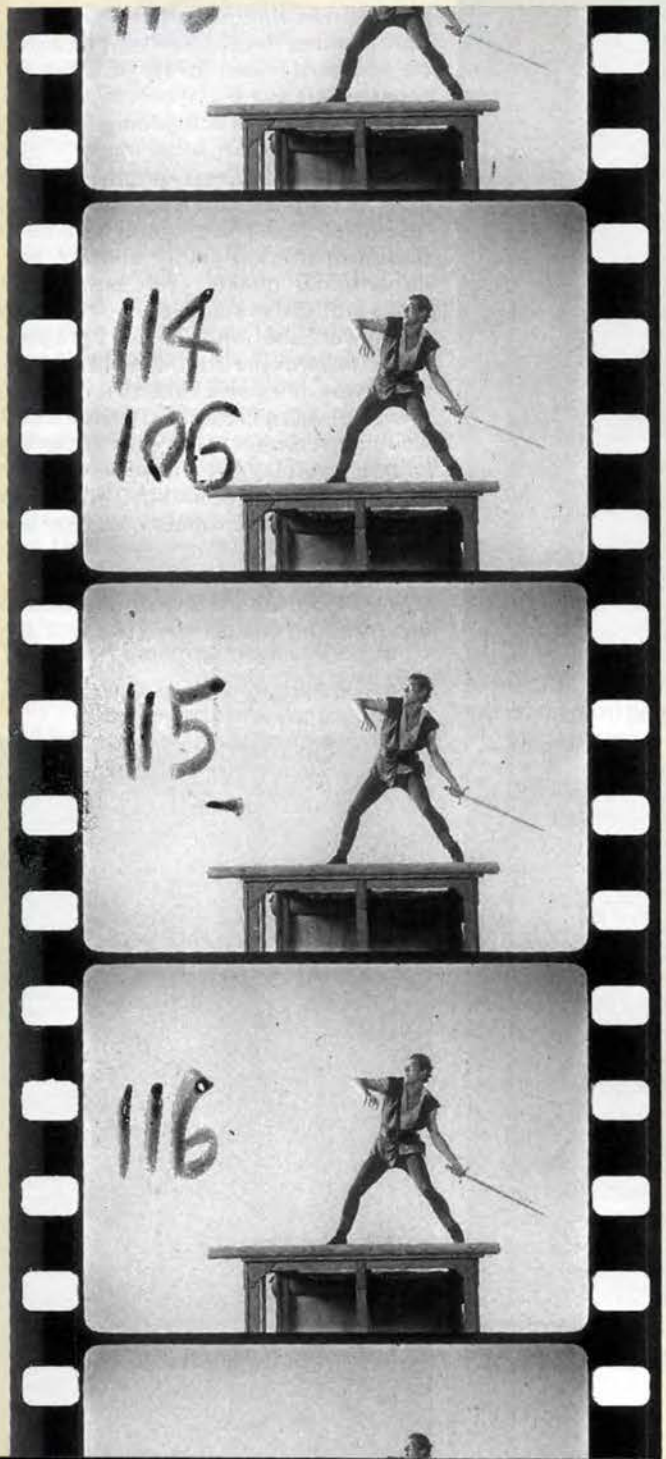
Through the Imp's magic, Jack is able to overcome Pendragon's evil powers and fight his way into the enchanted castle. He rescues Elaine, but she has been bewitched and betrays him. Before Jack can escape, Sigurd is transformed into a dog and little Peter into a chimpanzee.

At last, Jack manages to break Elaine's spell. When they reach the boat, Pendragon pits a monstrous two-headed giant against them. The Imp summons up a tentacled sea monster from the ocean bed, which kills the giant in a fierce battle, aided by Jack, the dog, and the chimpanzee.

Together they sail with the princess and head for home. But Pendragon has one last trick up his sleeve, his most terrible: He transforms himself into a giant Harpy and flies out to intercept the small craft. Sword-wielding Jack is carried away on the Harpy's back and manages to slay it in mid-air.

As Pendragon plunges into the sea, his magic dies with him. As for Jack and Elaine, who are very much in love, their future promises to be happy ever after.

Picture credits: All photos courtesy Jim Danforth, Phil Kellison, Stan Horsley, Wes Thompson, and Paul Mandell.



Credits

The Cast:

JACK	Kerwin Mathews
ELAINE	Judi Meredith
PENDRAGON	Torin Thatcher
GARNA	Walter Burke
PETER	Roger Mobley
SIGURD	Barry Kelley
IMP	Don Beddoe
KING MARK	Dayton Lumis
LADY CONSTANTINE	Anna Lee
JACK'S MOTHER	Helen Wallace

The Production:

PRODUCER	Edward Small
DIRECTOR	Nathan Juran
ASSOCIATE PRODUCER	Robert E. Kent
ORIGINAL STORY	Orville Hampton
SCREENPLAY	Orville Hampton & Nathan Juran
DIRECTOR OF PHOTOGRAPHY	David S. Horsley, ASC
CAMERA OPERATOR	Phil Kellison
ART DIRECTORS	Fernando Carrere Frank McCoy
ORIGINAL MUSIC	Paul Sawtell Bert Shefter
FILM EDITOR	Grant Whytock
SOUND MIXER	John Kean
SPECIAL MAKEUP	Charles Gemora

Special Photographic Effects:

DESIGNER	Howard A. Anderson Co.
CREATURE DESIGN	Louis MacManus
EFFECTS ANIMATION UNIT	Boyd Vaughan Lloyd Vaughn, Nancy van Rensaeller, Don MacManus
PHYSICAL EFFECTS	August Lohman
MECHANICAL ENGINEER	Wes Thompson

Stop-Motion Effects:

DESIGNER	Project Unlimited
MANAGERS	Gene Warren, Tim Baar
CREATURE SCULPTURE	Wah Chang
MECHANICAL DESIGN	Marcel Delgado
MECHANICAL FOREMAN	Victor Delgado
PROCESS SUPERVISOR	Phil Kellison
STOP-MOTION ANIMATION	Jim Danforth, Tom Holland, Dave Pal, Don Sahlin
MINIATURES AND PROPS	Paul LeBaron, Ralph Rodine, Howard Weeks
MATTE ARTIST	Bill Brace
DISTRIBUTOR	United Artists
RUNNING TIME	91 minutes