



## CHAPTER 11 IN THE LAP OF THE GODS



## Clash of the Titans

I suppose the two subjects I am best known for, in cinematic terms, are dinosaurs and mythology. Greek and Roman myths contained characters and fantastic creatures that were ideal for cinematic adventures, which few, if any, film-makers had considered. Gradually I began to explore the possibility of adapting some of them for the screen and realized that if some of the adventures were combined with 20th-century storytelling, a timeless narrative could be constructed that would appeal to both young and old. One such story, that of Perseus and his quest to kill the Gorgon Medusa and save Andromeda from a sea monster, was perfect for such a project. I first considered adapting the story in the late 1950s and then again after *Jason*. Aside from being a wonderful tale, the main attraction was the creatures, especially Medusa the Gorgon, a unique character who lent herself perfectly to Dynamation. However, what held me back from developing it into a workable outline was the tricky question of rationalizing the complex quest and the hero's name. I'm sure I could have eventually overcome the first problem, but the name Perseus was too close to Percy, which at that time was associated in America with a sissy. To avoid ridicule, therefore, I felt I either had to change the hero's name or drop it completely. Both would irrevocably alter the legend, so I let it slip into the back of my mind, as other, more concrete projects materialized.

The story reared its head again in 1969. Whilst living on Skiathos (a Greek island near an area of the Aegean that had been associated with Perseus), Beverley Cross wrote an outline called *Perseus and the Gorgon's Head*. Unfortunately, we were already planning *Golden Voyage of Sinbad*, so unable to develop it, but during the making of *Sinbad and the Eye of the Tiger*, Beverley again suggested the idea. Needless to say, I was very keen, and we all felt the time was right for another Greek legend and that the name problem wasn't the hurdle it might have been decades before. Charles obtained National Film Development Fund finance to develop the story further, and all three of us began to enhance the outline by working out a compromise between Beverley's story and my key visual concepts. I made a

number of drawings: the Stygian Witches' lair, Medusa and Perseus, and various concepts of the Kraken, Pegasus and the witches. I also sculpted a bronze of Perseus slaying the Gorgon, which was not only essential in working out an entirely new concept of Medusa's appearance, but allowed Beverley to visualize the sequence and assisted in selling the whole idea during the budget presentation to potential backers.

Like the story of Jason, the original legend of Perseus is complex and convoluted, so we had to manipulate events, stealing from one legend and putting it in another. This modification is essential to take advantage of what the film medium has to offer. It's not that we feel we are better than Plato, it is just a question of making a suitable film that will hold an audience's attention. For example, in the original legend the winged horse Pegasus springs from the blood of Medusa's head, an event that occurs towards the end of the saga. Beverley wanted the winged horse as one of Perseus' tools in his quest to save Andromeda, so he constructed a sequence that sees Perseus capturing and taming the creature. This introduced the horse and made for a spectacular early sequence that establishes a bond between Perseus, who we see as a strong idealistic hero, and the beast. However, the idea of a creature, or for that matter creatures, springing from the blood of Medusa was far too good an idea to discard, so Beverley decided to include a sequence in which giant scorpions spring from her blood.

As it was my task to visualize the story's events, I was conscious that we had to avoid the same situations seen in *Jason*, especially in the sequence featuring the gods of Olympus. After reading an early treatment by Beverley, I felt it required a transition between the gods and the mortals, similar to the chessboard used in *Jason*, which communicated to the audience that a deadly game was being played by the gods for the hearts and lives of the Greeks. I came up with the idea of using a miniature arena. Behind this 'arena of life' were niches containing hundreds of other characters reflecting all the Greek legends. Zeus would put the figures in the arena, where the gods

Left hand page top and bottom. The only key drawings I executed for what would become *Clash of the Titans*. These show (bottom) the lair of the Stygian witches and (top) my original concept for Perseus' meeting with Medusa. Please note the famous 'boob tube' that she is wearing. The drawing was made very early on and I didn't want to offend anyone, but in the end I realized how silly it looked.

would control their destinies. It was a vital tool in introducing the characters of our story, which is evident when Zeus takes the figure of Calibos and commands that 'He shall become abhorrent to human sight', whereupon the shadow of the tiny statue transforms into a monstrous creature. This tells you much about Zeus, and everything about Calibos, before the audience even sees him.

When we felt we had a workable screenplay and enough key scene illustrations, Charles approached Columbia Pictures. At first they were very excited and in principle approved the idea. However, as the picture progressed, it became evident that it would have to be an expensive production if we hoped to

complete the picture in the way we wished, and as costs rose, Columbia decided to pull out. To say that their decision was a huge setback would be an understatement, but we firmly believed the project was commercial. Charles approached other major companies but one by one they declined, because, I think, they were unable to visualize the film's full potential. Fortunately, after years of inactivity MGM were setting up as a production company again, and after reading the script and seeing the drawings, the head office rang Charles and said that our project was exactly the kind of picture they were looking to produce – namely good, exciting family entertainment. In fact, they wanted to make it on a much larger

scale than even we had envisioned, and put up extra money for star names. After all those years working with tiny budgets, Charles and I faced the prospect of working amongst premiere film stars, although I hasten to add that this didn't mean the effects budget would be in proportion to the stars' salaries.

After months of pre-production, working on designs, models, storyboards, overcoming the problems of effects and with Beverley fine-tuning the script to incorporate the stars, everything was now ready to begin shooting. *Clash of the Titans* (the name had changed when we went to MGM) was set to be my sixteenth feature and the twelfth in association with Charles. Rather interestingly, its \$16 million budget exceeded the sum total of all the Schneer/Harryhausen collaborations up to that point.

Whilst we usually had a wish list of actors for the prospective parts, casting them, however, was never straightforward. Although some people think you just go out and merrily get everyone you think you should have, on our pictures that was never true. Because of budget, or more often the type of picture we were making, star names were usually reluctant to participate, so the task of casting was frequently a compromise. Nevertheless, the actors on our pictures were always professional, it is just that we never seemed to secure the actor we originally envisaged in the role. *Clash of the Titans* was the exception to the rule. Harry Hamlin was chosen by Charles and director Desmond Davis for the part of Perseus from over 300 candidates, including Malcolm McDowell, Michael York, Leigh Lawson and Richard Chamberlain. Harry had made only one picture but had considerable stage experience. Not only was it felt that he would be able to handle the role and the effects, but he also looked the part. Before MGM took the project on, several distributors suggested that we cast Arnold Schwarzenegger (long before he became a star) as the central character. However, his muscled physique would have reflected the 1950s and 60s Italian epics, which was an image we desperately tried to avoid. Although the ancient Greeks depicted their heroes as athletic, they were certainly not musclemen (with the exception of Hercules). Perseus had to look the part of a hero, not because of muscles, but because of his ability to fight and defeat his adversaries, whether through strength or cunning.

Apart from Hamlin, there was only one other key American actor in the film, the delightful Burgess Meredith, who played Ammon. We originally wanted Michael Hordern or Peter Ustinov, but MGM felt there were too many British actors and that American audiences would think it was a foreign film. We therefore agreed to Burgess being cast as the frustrated poet, and on reflection he was a perfect choice, giving the part a unique, eccentric 'pixie' quality. Leslie-Anne Down had first been considered for the part of Andromeda, but we decided that Judi Bowker, a relative newcomer, should be our heroine. Her beauty and vulnerability convinced us that she was perfect as the innocent pawn of almost everyone in the story.

As casting progressed, we had to ask ourselves, who do you secure to play the part of the father of the gods? We had considered John Gielgud, Orson Welles and Sir Ralph Richardson, but in the end Zeus had to be played by Laurence Olivier, who delivered much dignity and authority to the part. However, it was Maggie Smith as Thetis who had some of the best

After his daughter Danae (Vida Taylor) gives birth to a son which she calls Perseus, by the god Zeus (Laurence Olivier), King Acrisius (Donald Houston) of Argos has both cast into the sea in a casket. Zeus saves them and commands Poseidon (Jack Gwillim) to unleash the Kraken and destroy Acrisius and Argos. Years pass and Perseus (Harry Hamlin) grows to manhood. Thetis (Maggie Smith), angered when Zeus turns her son Calibos (Neil McCarthy) into a misshapen beast, transports Perseus to the city of Joppa where he meets Ammon (Burgess Meredith). After receiving three gifts (a helmet, sword and shield) from the gods, he travels to Joppa where he falls in love with Andromeda (Judi Bowker), daughter of Queen Cassiopeia (Siân Phillips), whose suitors are required to answer impossible riddles or be burned at the stake. Using his helmet, which makes him invisible, Perseus sets out to solve the latest riddle and sees Andromeda carried off during the night by a giant vulture. With Ammon's help, Perseus captures and tames Pegasus, last of the winged horses, and flies after Andromeda to the lair of Calibos. Perseus learns the answer to the riddle, but as he leaves, Calibos sees footprints in the dust and during a fight with Perseus, Calibos' hand is cut off. At the betrothal of Perseus and Andromeda, Cassiopeia foolishly declares her daughter more beautiful than Thetis herself, and the vengeful goddess orders Andromeda to be sacrificed to the Kraken. Having only a few days to seek a means of defeating the Kraken, Perseus seeks out the Stygian witches with the aid of Bubo, a mechanical owl sent by Athena (Susan Fleetwood). The three witches (Flora Robson, Freda Jackson and Anna Manahan) advise Perseus to kill Medusa, the last of the Gorgons who lives on the Isle of the Dead. Paying Charon to row him there Perseus defeats the two headed dog Dioskilos and then cuts off the head of Medusa, whose look can turn living things to stone. On the return journey Calibos releases the blood of the Medusa's head which mutates into three giant scorpions that Perseus and his men slay along with Calibos. As the Kraken rises from the sea, Perseus uses Medusa's head to turn the creature to stone. Perseus and Andromeda are reunited and are immortalized in the stars by Zeus.



**Above. The cast of *Clash of the Titans* on the set of Mount Olympus.** Front (left to right): Susan Fleetwood (Athena), Ursula Andress (Aphrodite), Laurence Olivier (Zeus), Claire Bloom (Hera), Maggie Smith (Thetis). Back (left to right): Burgess Meredith (Ammon), Pat Roach (Hephaestus), Jack Gwillim (Poseidon), Harry Hamlin (Perseus), Judi Bowker (Andromeda).

**Right hand page. Medusa's eyes.** I used what I call 'Joan Crawford lighting', which was especially effective in the 1945 film *Mildred Pierce*. The lighting simply highlighted her eyes to show her emotions, but with Medusa it emphasized the power to turn men to stone.



lines in the picture. For example, she says of Zeus, 'so many women... And all these transformations and disguises he invents in order to seduce them! A shower of gold, sometimes a bull or a swan... Why, once long ago, he even tried to ravish me—disguised as a cuttle-fish!' When Hera asks if he succeeded, Thetis bitchily replies, 'Certainly not!... I beat him at his own game—I simply turned myself into a shark.' Only Maggie Smith could deliver lines like that and get away with it. Also in the cast was an old friend and a fine actor, Jack Gwillim, previously King Aeetes in *Jason and the Argonauts*, who this time played Poseidon.

Director Desmond Davis was chosen by Charles for his impressive handling of *Girl With Green Eyes* (1964). We did not want a modern approach to the story, but it had to be converted to the screen with just the right balance of reality and fantasy. It was felt that Desmond would be able to achieve this, and as it turned out, he handled the subject especially well. I found him easy to work with, and although it took a while, he accepted the importance of the effects.

In April 1978 Charles and I began the all-important location recon, taking us to Sicily, Greece, Italy and Turkey. The journey was not as fruitful as we had hoped. The only location we decided upon was the amphitheatre in Ostia Antica, which was eventually used for the theatre in which Perseus encounters Ammon. In trying to find the perfect location for Medusa's temple, we looked at many exotic and fascinating ancient sites, but none seemed suitable. They were either too ruined or too commercial or both. In the end we decided to return to the tried and tested Spanish and Maltese locations where we knew we could guarantee good dramatic backgrounds, plus a few Southern Italian locations used so successfully in *Jason and the Argonauts*.

Principal photography began on 14 May 1979 at Pinewood Studios on Stages D and M, shooting the Olympus sequences, the Queen's apartments and Hephaestus' foundry. A week later we began the location photography in Spain, starting at a remote area called Guadix that was to be the 'Wells of the Moon'. We then went on to Mesa Loc for the desert scenes and finally to the mountains of Antequerra to shoot the journey to the witches' lair. On 14 June the production moved to Italy. Travelling there proved to be more of a problem than anticipated. To carry the

cast and crew, Charles had chartered a plane but about 1½ hours into the flight it developed engine trouble and the pilot had to 'feather' one engine, leaving us with only three. Eventually we landed safely at Perpignan, where we had to await repairs before flying on to Rome. Burgess Meredith and Terry Sharratt (the boom operator) refused to continue the flight on the same plane, and instead flew to Paris, then Rome.

Following completion of those scenes set at Ostia Antica in Italy, we moved south to what was left of the once uncrowded beaches at Palinuro (used in *Jason*) to film the River Styx and the Isle of the Dead. In a dried-up riverbed near Palinuro we filmed the scorpion sequence, then the temples at Paestum for the Dioskuros and Medusa sequences. Finally we flew to Malta on 6 July for a three-week schedule photographing the remainder of the locations and the interior sequences (Medusa's lair), which were shot in the aircraft hangar at Hal Far Airfield. The long shots of the city of Joppa were actually Cospicua harbour enhanced with miniature temples, a palace and a large statue in the foreground. The market place was shot in Fort St Elmo, and other scenes in Fort Rocco. The procession and the Kraken/sacrificial sequence was filmed mainly in the Malta tank, with additional rock scenes shot on Gozo island. On 31 July 1980 the main unit moved back to Pinewood Studios in England to film the remaining interior work, including the palace of Argos, the swamp and lair of Calibos, and the temple of Thetis. These were completed on Stage D, whilst Andromeda's bedroom was shot on Stage M, and the lair of the Stygian witches and the travelling mattes on the old 007 stage. We also had a second unit at Kinance Cove in Cornwall waiting for rough seas for the opening scenes. Live-action filming eventually wrapped on 1 September 1979 and by that time my workshop was ready.

For nearly eighteen months my working home would be the old effects sound stage at Pinewood, converted to accommodate the set-ups for animation. Occasionally I would work around the clock, sleeping on a cot in the studio office. In case you haven't guessed it by now, animation can be exhausting. Apart from the fact that the animator walks miles in a day, back and forth between camera and the model for each single frame exposure, there is the mental

strain of moving the models to ensure a 'flow' in the animation, and on top of that there are hundreds of other equations to consider. So the process becomes physically gruelling, although when there is a high and the scene is going well and one action naturally follows another, there is a 'rush' of adrenaline and you only become aware of the tiredness when the scene is complete.

Because of the extra pressures on the production, I brought in Janet Stevens, who had worked on sculptures for *Sinbad and the Eye of the Tiger*, to assist me with most of the models, particularly Medusa and the Kraken. Janet was extremely skilful in transforming my sketches into three-dimensional clay entities. Part of her talent was a genius for detail, which is crucial in the creation of stop-motion models. Without detail, models can lack conviction and look plastic. Witness the ones made by Warner Bros for *The Animal World*. Janet was a pleasure to work with and her unique contribution on those last two films was invaluable, adding a style that made them something special.

As always, the actual animation models I completed myself, assembling the armatures after dressing down, filing and soldering all the units together. When completed, I cast the foam latex by 'cooking' them, much as I had done since the days of *7th Voyage of Sinbad*. I then finished off the skin or covered them in a fur, inserted the eyes and made the teeth, tongue and ears. Sometimes models would require repair, so I would restore them overnight in my workshop at home, ready for the animation table next morning. I had to, so as to avoid delays in animation, and after all, they were the stars of the picture. Since I knew the models better than anyone, it made sense that I should assemble and look after them in times of need. This applied especially on *Clash*, when for the first time I had two animation assistants. As with the sculpting, it soon became apparent that the animation work would be too much for just one pair of hands. Charles was concerned that the animation would overrun its budget if I spent the extra time doing it all myself, so I reluctantly agreed to make enquiries about an assistant animator. Only one person could fit the bill as far as I was concerned, Jim Danforth, who Charles approached in 1978 to see if he would be interested. Jim is a meticulous



Above left. Me discussing what I wanted for Medusa with Janet Stevens. Janet had also worked on the sculptures for *Sinbad and the Eye of the Tiger*.



Above middle. With Steve Archer and the armatured model of Bubo.



Above right. Jim Danforth and myself getting to grips with making Pegasus fly. The tiny model of Harry can be seen on the model's back.

craftsman whose stop-motion animation work includes *The Wonderful World of the Brothers Grimm* (1962), *The Seven Faces of Dr. Lao* (1964) and *When Dinosaurs Ruled the Earth* (1971). Unfortunately, he was preparing *Conan* and unavailable, so for a while, whilst other tasks were completed, we ignored the potential problem. Following the completion of the live-action photography the issue raised its head again, and so we decided to talk to three UK animators. One of these was Steve Archer, who I had met some time before as a young fan when he had shown me an 8mm film of clay and wire animation. Steve's humorous, Puckish style stuck in my mind and I asked him to come to the studio in late 1979 to shoot a test with some of the models from *Eye of the Tiger*. Although his style was different from mine, he possessed a great talent. However, I was still very reluctant to lose complete control of the 'hands on' animation. I remembered how Obie had ended up by overseeing and doing little, if any. I didn't want that. It was not how I worked. The art of actually creating an artificial life-force in the characters themselves was always my first love and the organization just a means to an end. After much deliberation I decided to try and continue to do all the work myself. Barring accidents and misadventures, I believed it was still possible.

By late February 1980 I had finished most of the Pegasus roping sequence, a good deal of the Calibos footage and nearly all of the scorpion and vulture shots. However, due to technical problems with the film stock sprocket holes (the punch kept wearing and caused inaccuracy in second and third exposures), the work fell a month behind schedule. It eventually dawned on me that I would not make up the lost time and so, after discussions with Charles, decided to hire Steve, who started on 4 March 1980 animating several vulture flying sequences shot against blue-backing. Even with Steve now on board and both of us flat out on the animation, by the middle of summer we were still running behind schedule and Charles was becoming more and more anxious. In August 1980, as luck would have it, Charles received a call from Jim, who was apparently at a loose end after a project had fallen through. He arrived in the UK in September 1980 to begin animation on the Pegasus flying scenes and Dioskilos sequence. Although I couldn't have completed the film on time without both Jim's and Steve's invaluable assistance, I still managed to complete the majority of the hands-on animation myself. It wasn't that I wanted to say that this was my picture – not one film I have worked on can I truly say is 'mine', as all pictures are team efforts. The real reason was that I preferred to work alone. In my mind I had the sequences laid out in rough, and I suppose I didn't want to impose what I envisaged on another animator. I had never wanted to animate with someone looking over my shoulder, so to do that to another was suppressing their talent.

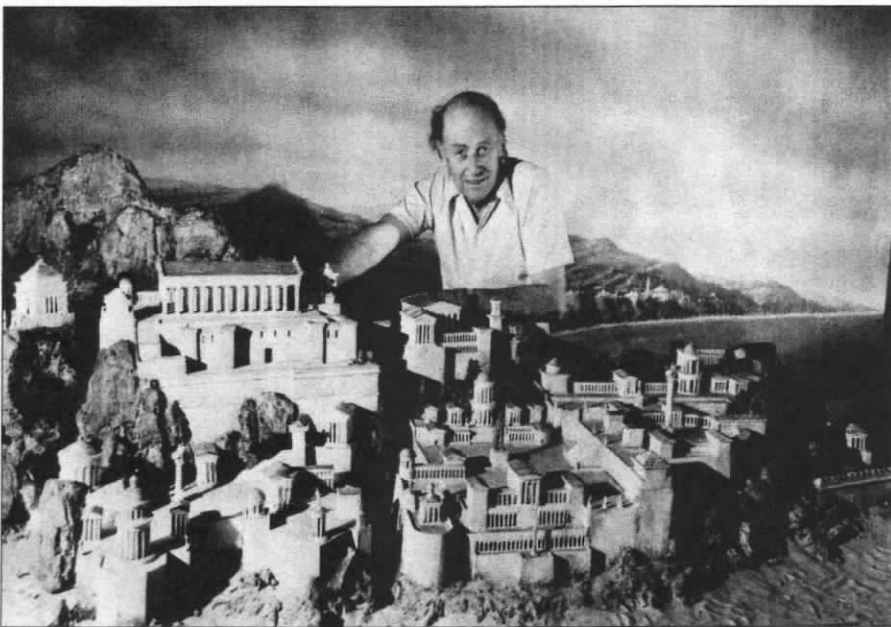
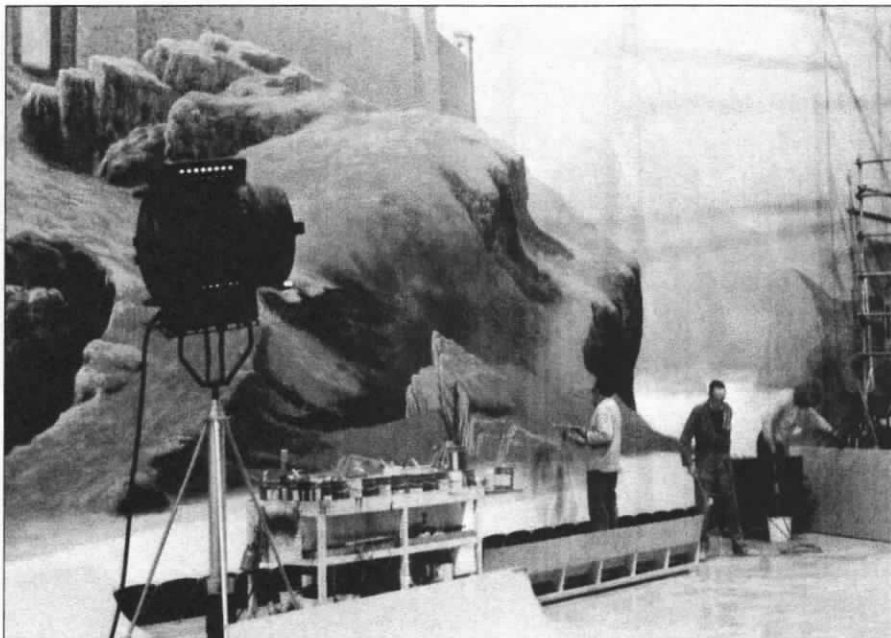
The opening scenes of the film take the audience to Olympus, the citadel of the Greek gods. Working with Frank White, the production designer, we created an Olympus that combined the look of paradise and a realistic dwelling for supreme beings, a reflection of the ancient Greek image of the home of the gods. We went for outsized columns (of which we could only see the bases), suggesting massive structures that could only be guessed at. To add scope and grandeur,

I also suggested a backdrop showing a city (influenced by John Martin's imaginative picture *Joshua Commanding the Sun to Stand Still*) extending over the peaks of Mount Olympus. Unfortunately, the beautifully painted backdrop is never clearly seen because there was too much stage smoke obscuring it. The long shot of Olympus was a model, constructed at Pinewood, measuring about 20 feet across.

The first Dynamation creature to appear in the film was the gigantic Kraken, a sea monster, the mutant offspring of a prehistoric reptile that had mated with one of the mighty Titans. There are many interpretations of what it looked like, but I wanted it to be at least part humanoid, making Andromeda's sacrifice to it more acceptable, much like Fay Wray was to King Kong. If all it had wanted was lunch, the creature would simply devour Andromeda and then return to the sea. His design was a combination of

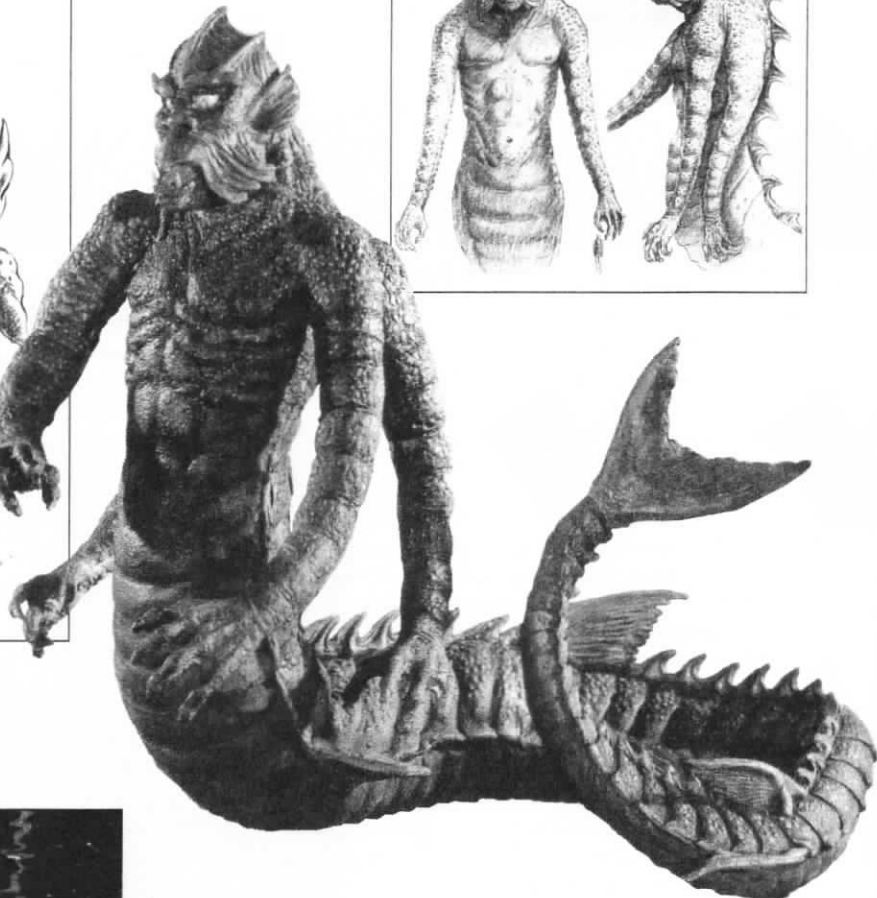
mythical merman, with his fish tail, and four arms resembling the tentacles of an octopus and various prehistoric creatures, which I hoped would make him appear more grotesque.

There were two armatured Kraken models. The first, about 18 inches high and almost 4 feet long from head to tail, was used for 95 per cent of the animation. The second was only the upper torso of the creature, and at 4 feet from the navel up was the largest armatured model I had ever constructed. Because of its size, the amount of latex over the armature made it extremely difficult to move. It required the muscles of a Greek wrestler to animate it. Fortunately, it was used only for detailed close-ups, namely in the final sequence when it fills the entire frame behind Pegasus and Bubo. Another armatured model of the creature's lower arm and hand was used for detailed close-ups. There were also two 4-foot non-armatured Krakens.



**Top. Painting the backdrop.** The backdrop to Olympus showed a city influenced by John Martin's imaginative picture *Joshua Commanding the Sun to Stand Still*. It was painted by the wonderful technicians at Pinewood Studios.

**Bottom. The Olympus model.** The long shot of Olympus was a model, constructed at Pinewood, measuring about 20 feet across. This is a publicity photograph in which I seem to be standing over the home of the gods like Zeus himself.

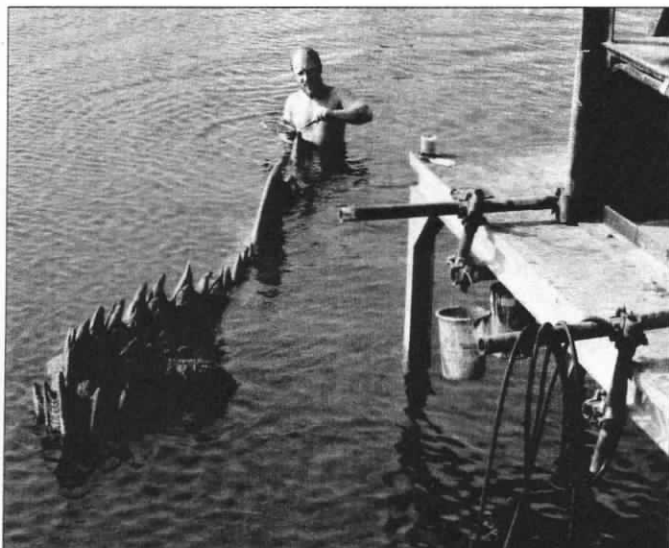


**Top left and top.** Drawings of the Kraken. The Kraken was a sea monster, the mutant offspring of a prehistoric reptile that had mated with one of the mighty Titans.

**Above.** A model of the armored Kraken. There was another armored model, which was just of the torso and head with his four arms. This was used for extreme close-ups, such as when Pegasus flies in front of him.

**Left.** Still of Kraken rising out of the sea. Any scenes that necessitate animation and a backdrop of water create huge problems, and this one of the Kraken rising out of the sea was no exception. In this shot I overcame some of the water problem is by having him appear from behind a promontory, and the water splashes were added later.

**Far left and below.** Stills of this Kraken in water tank. Colin Arthur's 15-foot Kraken, which he constructed specifically for the underwater scenes. Colin also did all the makeup for the picture.





one of solid latex used as a stand-in, whilst the other was made of sponge rubber, inside which was a rough support frame that rested on a teeter totter so the whole thing could be kept upright during the high speed photography of the creature rising from the sea.

The Kraken's release so that it can destroy Argos is performed by Poseidon. As we didn't want to ask Jack Gwillim to perform his scenes underwater with his mouth open, we photographed him at high speed on a stage in front of a blue screen at Pinewood. To make it appear as if his hair and clothes were being moved by the water, we used a wind machine and overprinted footage photographed through a glass tank filled with water and other elements to seem as though he was deep underwater.

Any scenes that necessitate animation and a backdrop of water create huge problems. In the climax of the picture the Kraken is seen pulling himself up, by his four arms, over rocks. Once emerged, I inserted the sea background plates with split-screen rear projection and completed it with churning water matted into the scene. The churning water was actually multiple exposures of controlled underwater explosions set up by Brian Smithies. They were photographed in the Malta tank at high speed (between 48 and 72 frames per second) against a blue sky from which, with some touching up, I made a matte. The explosions were then double printed three or four times so they looked bigger. These same

splashes were also used in the first Kraken scene as he rises from the sea off Argos. Of course, if you have water, the creature in it must look wet. For this I covered the entire model with glycerine, but because it dries out rapidly under studio lights, I had to reapply it every two or three frames, slowing everything down. Glycerine also has the side-effect of reacting with the rubber of the models, and this, combined with the intense heat of the lighting, has made them liable to disintegration over the subsequent years.

Producer Sam Goldwyn is credited to have uttered to one of his screenwriters the immortal lines, 'What we want is a story that starts with an earthquake and works its way up to a climax...'. In *Clash of the Titans* we endeavoured to follow his advice, beginning the story with the total destruction of a city by a wall of water created by the Kraken. Argos is not mentioned in the original Perseus legend, but in our version Zeus avenges the treatment of Perseus' mother by ordering the destruction of Argos, home of King Acrisius, Perseus' grandfather. Beverley chose Argos because it was one of the oldest Greek cities. We naturally visited the actual city when we were looking for locations, but it turned out to be very disappointing. Today it is nowhere near the sea, although it may have been once, and the surviving ruins are partially buried under what looks like a modern rubbish dump. In the process of trying to find 'our Argos', we visited a

number of walled cities in Greece and Turkey, even considering Palmyra in Syria and Leptis Magnus in North Africa, but none suited. In the end we used the Malta studio walled fort for live sequences, and a Maltese town enhanced with miniature Greek temples for the long shots.

When the cataclysmic wave hits the city, buildings, statues and people are swept away. Some scenes were achieved with real water and those on a larger scale with mattes. The former were all photographed within the fort's walls by using dump tanks. Where dump tanks and real people are used together, great caution is needed and everything checked and double-checked to make sure nothing can go wrong. On consulting the stuntmen, they were happy with the arrangements, but during the shooting one of them fell under the weight of the water and fractured some ribs.

Although I had overseen the destruction of sections of cities in my earlier career, the entire destruction of a city, albeit ancient, was a new challenge. On *Clash*, for the first time I had a budget that would allow me to film the entire sequence at high speed. No more animated crumbling buildings, this was the big league. The wave that rushes towards the unfortunate city begins with a series of stock shots (some of which were unused from *Jason and the Argonauts*) and completed by an artificial wave created in a special floor tank on one of the stages at Pinewood. To enable us to matte the wave(s) into whatever we liked, the entire tank was painted black with black velvet mounted behind. Into this we released water from dump tanks (also painted black), which we hoped would give us the required wave. Unfortunately, it didn't. The water just rushed flat along the bottom of the tank. I solved the problem by having a two-foot baton (again painted black) nailed at the base of the dump tank chute, so that when the water hit it, it would start to roll into a two-foot wave. It worked perfectly, and with the camera mounted low on the ground, giving it yet more height, the wave seemed 100 feet high.

For the long shots of the city's destruction by the wave, we constructed a more or less complete miniature of Argos in front of a painted backdrop and then matted the tank shots of the wave in front. For the closer shots Cliff Culley and his crew built sections of the city on the backlot at Pinewood. The 5-foot miniatures, which included temples and a large statue, were all constructed in block sections, allowing them to crumble realistically when several tons of water hit them. Between 23 and 28 April 1979, using two cameras, the destruction of the miniatures was shot at high speed. With miniature sets you are always at the whim of the dump tanks. Everything is over in a second, and water once released can do the unexpected. Because things didn't always collapse as planned or perhaps part of the set moved as one, we had to rebuild the miniature several times whilst the tanks were refilled and the ground dried out.

The human figures seen fleeing before the wave and falling beneath collapsing buildings were shot in the studio against blue-backing and then optically composited into the miniature. There was a lot of blue screen work on this picture, and ironically we had to send almost all of it to the States to be put together. One of the reasons we originally came to England was to use Rank Laboratories' travelling matte system, but by the time of *Clash* they had closed

For the opening underwater scenes we build a 15-foot Kraken. Colin Arthur, who had worked for us on the last Sinbad movie, began its construction in his living room, but it grew so enormous that it went right on through into his dining room and in the end had to be shipped by truck. Under the supervision of underwater cameraman Egil Woxholt (who had worked on *Mysterious Island* and also shot the aerial footage for *Clash of the Titans*), the model was towed in and out of a submerged cage set built in Camino Bay, on Malta. I watched the proceedings from the surface through a mask and snorkel. Unfortunately, there were unforeseen problems working with such a model underwater. Because it was made of sponge rubber, the wretched thing always wanted to float. To cure this problem it was weighed down with hundreds of pounds of lead, but this in turn led to another unexpected problem. After the first day's shoot we left the model on the beach, but by the next morning the lead had been pilfered, so we had to buy more to ballast it again. Everything went from bad to worse, and try as we might, the model just didn't look right. In an attempt to get movement into the creature, we tried to use a diver in a Kraken suit, but this too proved disastrous. While the idea sounds good, in reality the diver's movements were restricted by the cumbersome rubber suit, and he couldn't control his actions. Because MGM wanted footage for a preview trailer, some shots were used, but few remained in the final film.



Above. Still of the miniature square of Argos. This still shows the miniature square being filmed before its destruction by the tidal wave.

the operation. Frank Van der Veer in Hollywood completed some composites and Technicolor did others, although towards the end of production Roy Field joined us at Pinewood to complete the rest of the mattes.

The first Dynamation creature seen in detail is the giant vulture: the servant or agent of Calibos that carries Andromeda's astral image in a golden cage. In Beverley's original script it was to have been a huge bat or marsh hawk, but I felt that was a little too mundane. I suggested that it should be something ugly (I don't consider a bat ugly – perhaps that says something about me), something totally opposite to the beauty of Pegasus. After many discussions I came up with the vulture, a repellent image to most people and one which paralleled the concept of darkness and decay that Calibos represented. There were two models of the vulture, one some 10 inches high, with a wingspan of just over 20 inches and covered with crow feathers, used for close-ups and detail shots like the balcony scenes. The second was about 5 inches high with a 10-inch wingspan, and because it was

used for long shots, it was moulded entirely in latex, including the feathers. I obtained the crow feathers, along with all other natural furs, from various taxidermists, mainly the Hudson Bay Company near the London Embankment. I didn't go out and procure them by direct means. I always dreaded going into their emporium because it had the double effect of amazing and frightening me. There were so many furs hanging up I always wondered how there could possibly be any animals left alive in the world.

The vulture is first seen from inside Andromeda's bedroom where it places a cage on the balcony and then perches on the balustrade. This entire sequence was matted into the background area of the full set. Following the arrival of the creature, the astral image of the princess moves onto the balcony. The camera angle is now reversed and we see the vulture, this time in the foreground with its back to us, still perching on the balustrade. The live action was photographed on the real set, which I then used as a background plate. Next I constructed a miniature balustrade, placed it in

the foreground and animated the vulture with its back to the camera.

If Medusa was the main reason I wanted to film the story of Perseus, the flying horse Pegasus came a very close second. Since seeing the wingless flying horse in Korda's *The Thief of Bagdad*, I had been fascinated with the concept.

In total there were three Pegasus models. Two, approximately 12 inches high with 18-inch wingspans, were used for long shots. I did begin to build a third as a standby, but this only got to the armature stage before I realized it wasn't necessary. Then there was a larger model of about 18 inches high with a wingspan of 2½ feet, which was constructed when we realized that a more detailed model for close-ups would be required. In addition, I constructed a fully armatured 7-inch high model of Harry for the aerial shots of Perseus on the back of Pegasus. I chose the skin of unborn goats to cover all the models because the pelts had small pure white hairs in proportion to the size of the model. The carefully armatured wings were from a white dove.



**Top.** Storyboard pictures of destruction of Argos. A section of the storyboard showing how I originally conceived of its destruction. Beverley Cross chose Argos to be destroyed because it was one of the oldest Greek cities.

**Above.** Two scenes from the final film showing buildings collapsing and people being swept away. The one on the left is the model being destroyed by the water and the one on the right shows people (who were inserted by travelling matte) perishing under the wall of water and buildings.

**Right and above right.** Two stills showing the Argos miniature buildings on the backlot at Pinewood Studio. The top shows the technicians working on assembling the sections of buildings that would fall apart when the water hit them. In the top right of the still can be seen the dump tanks full of water. In the lower still the water has been released and the sections have been swept away.

I was intrigued to find out if an animated model of Pegasus could achieve even better results than that of the flying horse in Korda's film. I knew how I didn't want it to look. Some years before, I had seen an Italian epic that had used a real horse with very small wings. It seemed totally impractical, especially with a large, muscular man sitting on its back. A horse can weigh up to half a ton, therefore I had to find a logical balance between the proportions of the creature and its wings, even if everyone knows a horse can't really fly. Having studied a variety of references for the horse movements, including motion studies and photographs, I realized the best way was to simply watch them. However, I couldn't just copy their movements. To make Pegasus fly would need a motion that was part real and part pure imagination. If I didn't eliminate certain movements, the action would have looked mechanical. In essence, I had to compromise and take certain liberties. The main problem was what to do with the legs whilst the horse was flying. After several tests, which included posing the legs gracefully, tucking them under its belly and just letting them dangle, nothing seemed quite right. Eventually we hit on the straightforward gallop, allowing Pegasus to tread the air like a racehorse.



**Above.** Still of the model vulture. This is the more detailed of the two models with its wing span of over 20 inches and crow feathers. The giant vulture was the servant or agent of Calibos, which carries Andromeda's astral image in a golden cage.



**Right.** Drawing of how I had originally envisioned the vulture. In Beverley's original script the vulture was to have been a huge bat or marsh hawk, but I felt it was a little too mundane so I came up with the repellent vulture who seemed to embody decay.

The most visually exciting and challenging Pegasus sequence was the capture and taming of the flying horse by Perseus. The live-action plates for the sequence were shot day-for-night at the Guadix location chosen for the mountains in the background. The two trees and the pool in the foreground were added to lend a certain mystery to 'The Wells of the Moon' where the winged horses lived. The sequence shows Perseus roping the horse whilst wearing the helmet of invisibility, given to him by Athena. Thus all we see is a rope apparently moving on its own. To achieve this the rope was painted white and attached to thin wires at either end, which in turn were fixed off screen at the end where the horse was and kept taut by one of the crew at the other end. When photographed against the sky, the wire disappeared, leaving the rope seemingly suspended in mid-air. During the fight, Perseus' helmet of invisibility is knocked off and he appears, pulling on the rope. Perseus' sudden appearance was a dissolve, and at the point where he begins to become visible, I changed the real rope to a miniature one. During the live-action photography I had shown Harry how to mime the actions of pulling on a rope without holding anything, and back in my studio I animated the model of Pegasus with a section of wire painted white (to resemble the rope around its neck) and aligned the rest of it to match Harry's hands on the background plate.

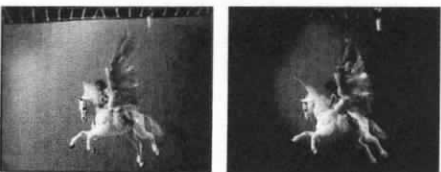
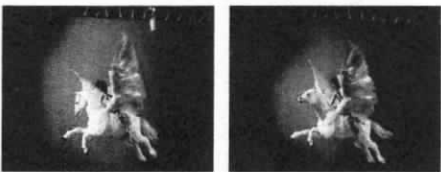
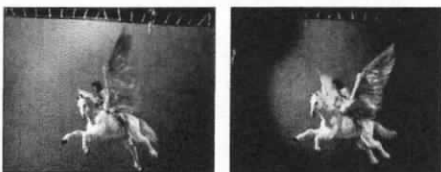
The close shots of Perseus on the horse in the air were a combination of mattes. First we photographed Harry against a blue screen astride a beer barrel, where the camera was dollied past to simulate flying past the camera. Later the sky and Pegasus' wings were added, making a double travelling matte. The wings seen in these shots were real duck wings (each

wing about three feet across), which had been treated by a taxidermist and fitted with armatures. For animation purposes they were attached to a board. After timing the Harry Hamlin live action, we animated the wings from different angles and at varying tempos so that they would always be moving up and down at the same speed as Harry on the blue backing.

Unlike most of my flying sequences, we opted for a rigid rod mount rather than the usual aerial wires because the model was far too heavy and wouldn't have given us a firm registration for a more realistic effect, particularly for the gallop. The mounting shaft or rod came up from below and was attached to the left-hand side of the model, which is why we mostly see him flying left to right. The scenes in which he is flying right to left were reversed optically. The up and down motion of the shaft was done manually, securing it each time with a locking device. In addition to that, there were three swivels in different planes, situated where the shaft connected to the model. This gave us up and down, left to right, and rotation. The linear movement was achieved by mounting the shaft rig on a borrowed 5-foot screwed lathe track that allowed the model to move along. The rod mount was optically lost with a variation on the method used to lose the wires in the *Superman* films. Mounted on the shaft was a V-shaped mirror that reflected the blue screen behind. The point of the V was towards the camera so that it couldn't be seen. This then reproduced the blue screen and later, when the sky and clouds were added, obscured the metal shaft. Jim Danforth was assigned to carry out most of the Pegasus aerial scenes, and his professionalism certainly showed through in enhancing the rather difficult sequences.

Calibos, Lord of the Marsh, was another creature not found in Greek mythology. The character's name was lifted by Beverley from Shakespeare's *The Tempest*, fashioning him after Caliban, the savage and deformed slave. A perfect Dynamation character, half man, half beast, like all the creatures, he went through many changes in both the script and on my drawing board. As always with a humanoid figure, one of the most important elements of the design was to make him *not* look as if he was a man in a rubber suit. Therefore I gave him a demonic look accentuated by a cloven hoof and a reptilian tail.

Throughout pre-production the character of Calibos was to have been dumb. This was to avoid spending vast amounts of time attempting to animate the model to dialogue. However, just before the final shooting script was written, it was decided that he had to communicate, and after much deliberation the problem was solved by using an actor in Calibos makeup for close-ups when dialogue was required. Based on the model and my drawings, Colin Arthur created the wonderful makeup for British actor Neil McCarthy, who possessed a good basic facial structure for the character. The model therefore only appears in medium and long shots where the legs and tail are seen. As it was the first time a Dynamation character had lines, I was a little apprehensive about whether or not the two extremes of model and actor would work. I needn't have worried. Neil played the part beyond all expectations, and when seen edited together, Neil and the model blend perfectly. Perhaps one of the best examples of the intercuts between animation and live footage is during the swamp sequence where Calibos wrestles with Perseus. I employed a number of medium shots of the model in close 'contact' with Harry Hamlin, an effect that necessitated accurate



**Above left.** Harry Hamlin roping Pegasus. During the live-action photography I had shown Harry how to mime the actions of pulling on a rope without holding anything. Later back in my studio I animated the model of Pegasus with a section of wire painted white (to resemble the rope around its neck) and aligned the rest of it to match Harry's hands on the background plate.

**Left.** Stills of Pegasus model on rod and track. We used a rigid rod mount and track to make Pegasus 'fly'.

**Above.** Drawing of Calibos. Calibos's name was lifted by Beverley from Shakespeare's *The Tempest*, fashioning him after Caliban, the savage and deformed slave.

**Right.** Still of Neil McCarthy in makeup. Based on my model and drawings, Colin Arthur created the wonderful makeup for British actor Neil McCarthy, who possessed a good basic facial structure for Calibos.



choreography in the plate photography and precise alignment of the model during animation. This was all made much easier by Poggi, who was again in charge of stunts and swordplay on the picture. Working together we choreographed the sequence with a stuntman who had to always keep himself in front or to the side of Harry (it was here that I would insert the model). We rehearsed the action three or four times and then, when everyone was happy and Harry knew how to hold his arm, we shot the scenes with Harry shadow boxing. In the animation studio I then matched the movements of the Calibos model to the struggling actions of Harry Hamlin. To add an extra realistic element to the fight, I planned to have splashes made in the water during the live-action photography. These would have then been matched to where the model's legs and tail would have made contact with the water. Sadly, time didn't allow me that little luxury, but on reflection I don't believe the exciting atmosphere of the sequence suffers from the loss.

There are two Calibos models. The largest, about 18 inches high, was constructed from Trog. I reluctantly stripped him down to the armature, altered one of the foot armatures and added the tail armature. There was also a smaller model used for the long shots in which he appears with Pegasus and for the poignant scene in the temple where we see him pleading with his mother Thetis for revenge against Perseus. This was a favourite scene of mine because we see Calibos display both vulnerability and extreme hatred, telling us much about the character.

There was some concern that audiences might miss Calibos' cloven hoof, so to emphasize this I dramatically introduced the deformity when he first appears to Andromeda by having him step into frame. From that point the audience know they are going to see something abhorrent, but then the camera pans upwards, showing the back of Calibos, whereupon they realize the full extent of the deformity and how vindictive Zeus had been.

Although it looks simple, shots such as the pan up can involve much planning, time and patience. It would have begun during the live-action plate photography where Judi is in the background and the camera panned upwards. In the animation studio I would match the pan upwards by panning up the model, which was on a miniature foreground set in front of the rear projection screen, at the exact same rate. Of course, I couldn't move the camera, so I mounted the model and the miniature set on a table, which was in turn mounted on a crane device. As the rear projection pan progressed, I would mark a point, perhaps a rock, on the rear projection screen with tape, giving me the correct measurement to lower the table on the crane. I would lower the table a fraction of an inch to match the rate of pan up on the rear projection plate, at the same time as animating the model's movements.

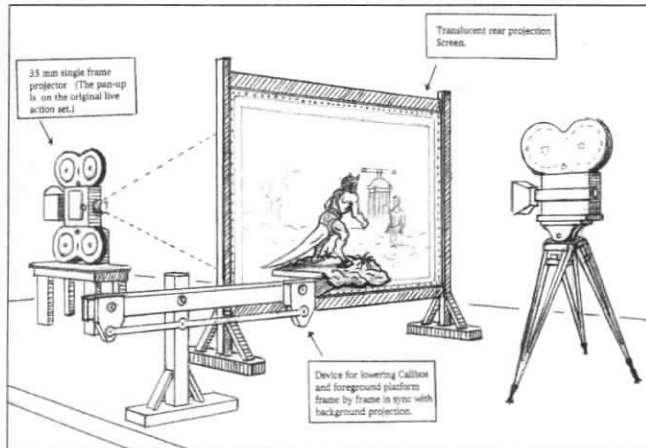
If Calibos was the villain, the owl sent by Athena to help Perseus was the comic relief. Bubo gave us a rare opportunity to instil some gentle humour into the story, although I was a little concerned, remembering the mistakes made in *Mighty Joe Young*. However, I was persuaded and reassured by Beverley that the balance between the heroics and the comedy would be necessary and appropriate. In the event Bubo was perfect for the story, and I must confess that the gentle humour it allowed was crucial. Contrary to what some critics said at the time, Bubo was invented before R2D2 from *Star Wars*. This inference irritated all of us involved in the story development.

There were three different armatured models of Bubo: a detailed 18-inch high model for close-ups, a medium 4-inch high model for the flying sequences, and a tiny 1 1/2-inch model for long shots. The first was constructed mainly of fibreglass covered with brass 'feathers', but the wings were armatured, covered in latex and painted to resemble the larger model. The medium model was made entirely of latex over an armature and again painted to look like brass. Only when we had shot a lot of the flying footage did I

construct the tiny model, made entirely of metal and with simple copper wings without an armature. For the aerial photography we constructed a mechanism precisely machined to run along an overhead wood track. Three aerial brace wires ran from this, holding the model from above, but for extra stability during the animation, we ran a fourth wire from the bottom of the model to a paper cup filled with sand. To save time we also used a radio-controlled mechanized model constructed by Colin Chivers and David Knowles. Like the main armatured one, it was about 18 inches high, and used mainly in scenes where the actors were seen handling him. Although limited, its movements included flapping its wings, revolving its head, spinning its eyes and opening and closing its beak, accomplished with tiny motors inside the body.

Steve worked on much of Bubo's animation and gave the character the impish personality that made him one of the special features of the film. From Bubo's first appearance, it is established that although he has been sent from the gods, he is a funny little character. Perseus and his men are in a desolate landscape, relieved only by a gnarled tree. Slowly, from the distance Bubo flies towards them and lands on a tree branch that snaps, sending him toppling to the ground. For the long shots we used the smallest model, then the medium model for the next shots of him hovering and descending to the branch, and finally the full model for the landing and fall. Apart from the model of Bubo and the branch on which he lands, everything else was back projection. The tree itself was matted out to enable us to fix the branch by means of a rod hidden behind the matte of the tree. After the animation, the tree was replaced by a second pass through the camera and background plate.

With the help of Bubo, Perseus finds his way to the lair of the Stygian Witches. These ladies were an amalgamation of the Stygian Nymphs from whom Perseus had to obtain the means of defeating Medusa, and the Gorgon's three sisters who share a single eye.



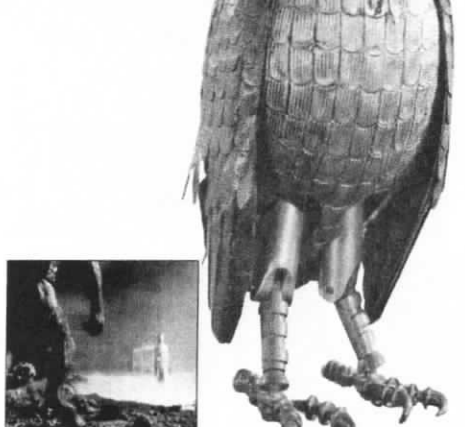
**Top left and left. Stills of Calibos.** The large 18-inch model of Calibos was constructed from Trog. I reluctantly stripped him down to the armature, altered one of the foot armatures and added the tail armature.

**Above. A drawing showing how the first appearance of Calibos was achieved.** The first time we see Calibos is when Andromeda arrives in the swamp and a cloven hoof steps into the picture. This may look simple on the screen but was in fact quite complex. For it I constructed a crane-like device that lowered the model frame by frame to match the rear projection plate of Andromeda.

**Right. Calibos' cloven hoof steps into the picture.** A still of how the effect looked in the final film.

**Top right. Sketch of Bubo with wings open.** One of my earliest sketches for Bubo.

**Far right. Still of model Bubo.** This was one of three armatured models of Bubo and in addition to that there was also the radio-controlled model.



These marvellous characters were played with great gusto by Flora Robson, Freda Jackson and Anna Manahan. Despite the live rats running about the set and problems with their cumbersome makeup, which made it very difficult to see properly, so causing Freda to fall over and Anna to set fire to her costume, they hugely enjoyed playing the three old crones squabbling over the eye. To help keep the sequence as light as possible, we inserted some amusing visuals, including a hand coming out of the cauldron, which is pushed back in by one of the witches. Originally this was to have been a skeleton hand, but we thought the real one worked much better.

The witches tell Perseus that to find Medusa he must cross the Styx to the Isle of the Dead. Normally one would have to be dead to cross the Styx, but in our story Perseus pays Charon, a miser who ferries the dead, to take him and his men to the other side. This was shot on the beach at Palinuro, near the rock arch used for the Talos sequence in *Jason and the Argonauts*. The Isle of the Dead itself was a natural island off the coast called Scoglio del Coniglio, on which I matted a temple and an extension to make it seem larger. The swirling mist was added later. Once on the Isle, the men climb up through a passage that leads them to a temple (one of the three at Paestum in southern Italy used in *Jason* for the Phineas/Harpy sequence). Here they would encounter the first of the two creatures living in that place of the damned.

The first of the creatures is the guardian of Medusa's shrine, Dioskilos, a two-headed dog. He was actually based on Cerberus, a three-headed dog (sometimes described as possessing fifty heads) who guarded the entrance to Hades, or the shores of the Styx, to prevent the living from entering and the dead from leaving. Originally we wanted to keep the three heads, but although I struggled to sculpt a realistic model, it looked far too grotesque and top heavy and was therefore totally unbelievable. Even with two heads we had to manipulate the design quite extensively to arrive at a beast that retained a feel for mythology but also kept a sense of proportion. The Dioskilos model was about 7 inches high, 11 inches long and covered in very exotic Siberian rabbit fur that was prone to movement during animation.

When originally conceived, the Dioskilos sequence was intended to be longer and more violent. It was cut down when we realized we had two key sequences back-to-back, and the violence was scaled down so that it wouldn't alienate a younger audience. Some examples of what we removed from the sequence included a scene in which the creature was to have bitten into a man's arm and Perseus cutting off one of the creature's heads even though it doesn't stop it. This last scene was dispensed with because of the violence and its similarity to the Medusa sequence immediately following it. In the final film one of the heads is 'killed' but not actually cut off. This was

achieved by animating the model in front of the rear projection screen and letting Harry's sword appear to go into the creature from the side. As the action continues, blood oozed from the wound. The second thrust by Harry is delivered to the creature's chest by substituting a miniature sword at the point of entry. Another dropped feature was the conclusion of the fight on a stone spiral staircase in the temple, showing Dioskilos and Perseus plunging from its summit to the temple floor. I suspect everyone thought it too similar to the skeleton fight in *The 7th Voyage of Sinbad*. It's a pity, because in the final analysis the sequence required a more spectacular climax. Although I had designed the sequence, a lot of the animation was completed by Jim assisted by Steve. Considering how it was altered and cut down in favour of the next sequence, Dioskilos had much originality and excitement.

Dioskilos was always meant to lead us into, what was for me, the most exciting sequence in the film: the conflict with the Gorgon Medusa. The Medusa sequence is perhaps the second most famous sequence from all our films and one of my most satisfying – as near perfect as I was ever able to achieve. One of three Gorgon sisters, Medusa had once been beautiful, but after a violation in the temple of Athena (in our story it was Aphrodite), the goddess turned her hair into serpents and gave her the curse of turning all living things that looked at her into stone.



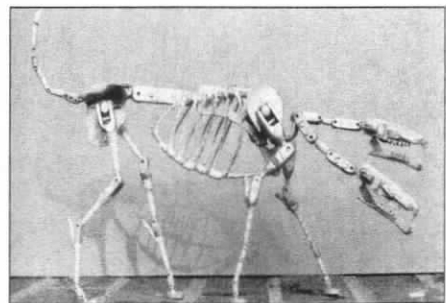
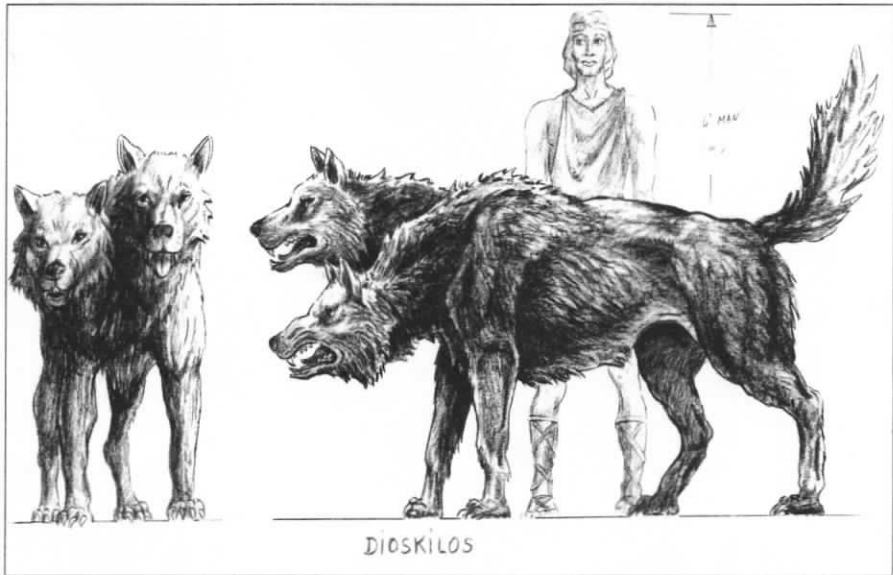
**Above. Still of Bubo landing on branch.** From Bubo's first appearance, it is established that although he has been sent from the gods, he is a funny little character.

**Above right. Drawing of Dioskilos.** Dioskilos was actually based on Cerberus, a three-headed dog (sometimes described as having fifty heads, which would have been an impossible animation task to set myself) who guarded the entrance to Hades, or the shores of the Styx, to prevent the living from entering and the dead from leaving. In our film he guards the temple of Medusa.

**Right. Model of Dioskilos.** The Dioskilos model was about 7 inches high, 11 inches long and covered in exotic Siberian rabbit fur that was very prone to movement during animation.

**Far right. Armature of Dioskilos.** This armature is a good example of exactly how complex they were. Since my father's death in the early 1960s I had ordered the ball and socket joints and struts from a manufacturing company and then assembled them myself for whatever creation I had in mind.

**Bottom right. Dioskilos on the animation table.**



To develop Medusa into a workable Dynamation character, I began by researching how art, literature and films had portrayed her, and I was often surprised to discover that most representations of her had been as a beautiful woman with serpents in her hair. The two paintings that best represented her were Caravaggio's *Medusa* and Leonardo da Vinci's *Testa di Medusa*, but even in these gruesome portrayals she is seen as attractive, making it extremely difficult for me to believe that she could turn anyone to stone. I felt we needed a striking and yet unconventionally hideously ugly demon. In Florence there is a stunning statue by Cellini of Perseus holding the severed head of Medusa at arm's length. It is a frightening yet beautiful rendition of the legend, and the one on which I based the face of my Medusa. Taking the effect Cellini had produced, I designed her to possess a mesmerizing ugliness built on a beautiful bone structure.

The torso would have to complement her facial ugliness. In most renditions of Medusa it is unseen, but when shown (as in the Hammer film *The Gorgon*, 1964), she is usually wearing a diaphanous gown,

which would have been impossible to animate. I decided to give her a non-human body and expose as much of it as dignity would allow. In fact the drawing of Medusa was the earliest I completed for *Clash* (dating back to 1977), and it shows her wearing a discreet boob tube. However, when it came to designing the model, I experimented with her wearing a bra-like garment, but it looked vulgar, so in the end everyone agreed that the offending garment should be removed (I suppose one could say she was the first lady to burn her bra) and Medusa's potentially offending nipples were painted to blend in with the rest of her torso. The bow and arrows were not only an aid by which to kill, but by firing the arrows she was able to attract the full attention of her victims to look directly into her deadly eyes.

The number of snakes on her hair was a matter of some debate before a compromise was reached between aesthetics and practicality. The fewer we had, the less complicated animation would be, but I didn't want to destroy the appearance by having too few. After all, who wants a Gorgon that's skimpy on snakes? I eventually opted for twelve. Instead of

making them emerge from the skull, I 'laid' them on her head to take up more space. Because she possessed snakes for hair, it seemed an obvious progression to complement these by designing her lower torso as that of a huge snake, to which I added a rattlesnake tail, giving the opening scenes a sense of foreboding.

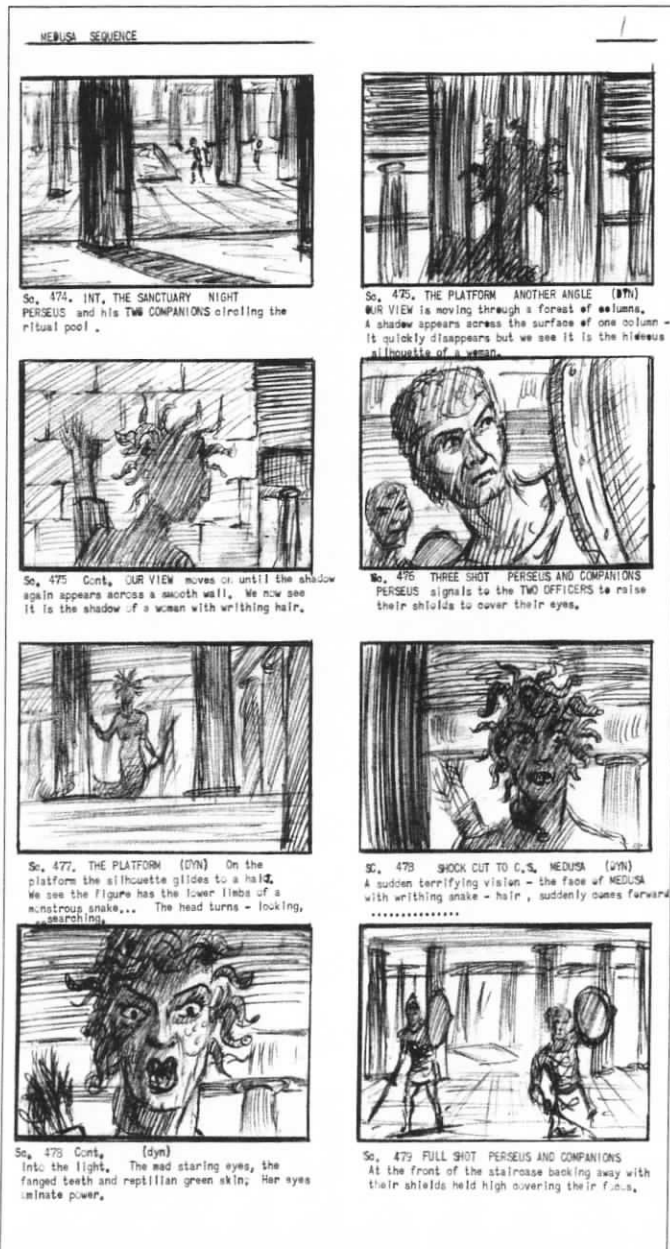
My early drawing of Medusa also portrayed her within the columns of the temple where Dioskilos is encountered, but as the development of the story progressed, we decided that Perseus and his men should descend into a vaulted chamber, a kind of ante-chamber to the underworld. The design of the chamber reflected this idea. It is a dark, mysterious place, with squat columns, ancient symbols and deep strong colours; a nebulous affair based mainly on the Palace of Knossos in Crete, but enhanced with flickering fires, shadows and a selection of Medusa's motionless victims. Lighting, as in all such sequences, played a huge role in achieving the right atmosphere. The full set (constructed and photographed in the hangar on Malta) was lit with flickering flames, casting ominous moving shadows in every corner and a mood of subtle menace. Grotesque shadows on



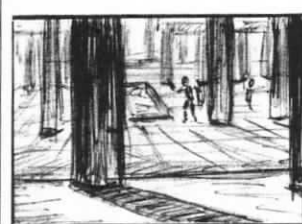
**Above far left, top and above. Stills of model Medusa's face.** Taking the effect Cellini had produced in his statue of Medusa, I designed her to possess a mesmerizing ugliness built on a beautiful bone structure. The model was so detailed that she still looked good in extreme close-up.

**Left. Drawing of Medusa with her bow and arrow.** This drawing of Medusa was the earliest I completed for *Clash* (dating back to 1977), showing her wearing a discreet boob tube.

**Right, right hand page near right and far right. Three pages of the storyboard for the appearance of Medusa.** I had always intended the appearance of Medusa to be slow and terrifying, as her shadow is cast by the flickering light onto a wall and then she emerges from the darkness into the light.



**MEDUSA SEQUENCE**



Sc. 474. INT, THE SANCTUARY NIGHT PERSEUS and his TWO COMPANIONS circling the ritual pool.



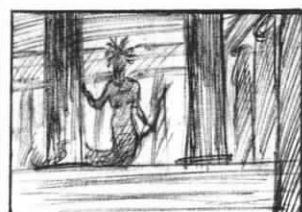
Sc. 475. THE PLATFORM ANOTHER ANGLE (DYN) OUR VIEW is moving through a forest of columns. A shadow appears across the surface of one column - it quickly disappears but we see it is the hideous silhouette of a woman.



Sc. 475 Cont. OUR VIEW moves on until the shadow again appears across a smooth wall. We now see it is the shadow of a woman with writhing hair.



Sc. 476 THREE SHOT PERSEUS AND COMPANIONS PERSEUS signals to the TWO OFFICERS to raise their shields to cover their eyes.



Sc. 477. THE PLATFORM (DYN) On the platform the silhouette glides to a halt. We see the figure has the lower limbs of a monstrous snake... The head turns - looking, searching.



Sc. 478 SHOCK CUT TO C.S. MEDUSA (DYN) A sudden terrifying vision - the face of MEDUSA with writhing snake-hair, suddenly comes forward



Sc. 478 Cont. (dym) Into the light. The mad staring eyes, the fanged teeth and reptilian green skin; Her eyes emit power.



Sc. 479 FULL SHOT PERSEUS AND COMPANIONS At the front of the staircase backing away with their shields held high covering their faces.

the chamber's walls and columns herald the arrival of Medusa, and when she finally appears in full frame, her face is lit with what I call Joan Crawford lighting. If you look at many of her films, for example *Mildred Pierce*, you will notice that Crawford moves in and out of shadows, or when stationary has a light across only her eyes. The technique has the effect of dramatizing a point ideally suited to highlighting Medusa's eyes. Lighting also has to be matched between the background plate and the miniature foreground, whether it is a continuation of a full-size set, the reflection of sunlight or shadows. With Medusa's lair the flickering light cast by the real brazier fires had to be reproduced onto her torso. To achieve this I used a technique that I had developed for *Hansel and Gretel* where we see Gretel looking into the witch's oven. I constructed an 18-inch round Plexiglas plate into which I cut various sizes of hole, and over these were taped various red and orange cells that would produce different densities of light on the figure. I mounted the whole thing on a 5-6 foot stand and placed it in front of a light with the lens taken out. When the wheel was

moved, it would cast a varying light on Medusa, making it appear as if she were lit by open fires. To animate the whole thing, I fixed a special screw to the centre of the wheel, allowing me to move it a fraction of an inch at a time to co-ordinate it with the animation of Medusa. When projected, the model of Medusa is seen bathed in the same flickering light as the background.

Like all my creations, Medusa needed to move in a special way. Her snake-like lower torso would dictate certain movements, but she had a human upper torso that would in effect make her top-heavy. Even when I was setting up for the animation, I had no idea how she was going to move, but then a long forgotten image from the 1932 Tod Browning film *Freaks* surfaced, and I knew how to approach it. In this film a legless man is seen pulling himself around by his hands, an action I found rather disturbing at the time, but I could see that Medusa (a freak created by the gods) would also possess such a grotesque action as she struggled to pull the unnatural weight of her half-human, half-snake body around. It would exaggerate her deformities.

The full appearance of Medusa is anticipated by silhouette shots of her tail rattling in anticipation of her prey and the outline on a column of her upper torso with her hair writhing. The tension increases when we see the whole chamber from Medusa's point of view as she searches for the intruders. The first 'action' has Medusa firing an arrow at the shield of one of Perseus' companions. Therefore I had to 'connect' the model in the foreground with the man who appeared in the rear projection. This began on the live set in Malta, where Brian Smithies rigged a real arrow on a wire, shot by him off camera so that it hit the shield. The smoke trail effect that came from the arrow was also created at this time. Later I animated the Medusa model in front of the rear projection of the real arrow. The model was placed very precisely so that I could animate her letting off a miniature arrow, which after leaving the miniature bow was taken away when the real arrow on the rear plate appears. Originally it had been intended to have Medusa dip the arrow heads into an open wound, as her blood was deadly poison, but we decided that dipping the arrows each time was a little

MEUSA SEQUENCE 2

Sc. 480, MEDIUM SHOT ON MEDUSA (DYN)  
She slithers forward to the edge of the platform. She draws an arrow from the quiver on her back.

Sc. 481, MEDIUM SHOT PERSEUS  
Carefully, he turns - so as to see the apparition at the head of the stairs reflected in his shield.

Sc. 482, MED. CLOSE SHOT MEDUSA (DYN)  
(Same as 480) With cold deliberation she opens her forearm with the point of the arrow. She dabbles the arrow-head in the dark blood.

Sc. 484 (Same as 480) (DYN)  
MEDUSA fits the smoking arrow to her bow.

Sc. 485 L.S. GROTTO & POOL MEDUSA IN F.G. (DYN)  
The two officers retreat. The fourth officer sives backward always keeping his shield well up.....

Sc. 488, MEDIUM SHOT ON SECOND OFFICER  
The arrow strikes him in the back. OUR VIEW pans down as he falls forward into the ritual pool. His body smokes and corrupts.

Sc. 488, CLOSE SHOT MEDUSA (DYN) Her evil eyes gleam with satisfaction. She fits a second arrow to her bow.

MEUSA SEQUENCE 3

Sc. 493 CLOSE SHOT FOURTH OFFICER  
As he looks up. Also Sc. 394, 396

Sc. 494, C.S. MEDUSA (DYN) A strange power comes into her eyes as the CAMERA ZOOMS INTO.

Sc. 494 cont., 496 MEDUSA'S EYES, ... (DYN) a big close shot of her eyes - wide, burning, compelling.....

Sc. 497 M.S. THE FOURTH OFFICER (DYN)  
Gradually, horribly, he is petrified..... He is turned into a figure of stone.....

Sc. 499, C.S. PERSEUS  
Watching - Appalled.....

Sc. 499, MEDIUM SHOT FOURTH OFFICER (DYN)  
As he turns into stone.

Sc. 500, M.S. PERSEUS He is knocked reeling but holds onto the shield.... He seeks cover...

Sc. 500, FULL SHOT THE GROTTO (DYN)  
MEDUSA begins to glide down the stairs -

too grim. After the arrow hits his shield, the man makes the fatal mistake of looking at Medusa, whereupon her eyes turn him to stone. This effect was achieved by double exposure. When the man falls down and looks back, I matted out the area of the real actor except his cloak. I then made a small miniature model of the actor's pose, which I then dissolved into the matte. The clothing did not change, only the figure.

In an early screenplay Medusa was to have been slain by Perseus' shield. The shield, with a serrated edge, was to have been thrown like a Frisbee across the chamber to slice off the Gorgon's head. Today I can't believe we even considered this over the sword, but at the time we were concerned that the film wouldn't get an appropriate certificate because it might be considered too violent to simply chop off her head with a sword. We figured that somehow the shield would divorce Perseus from the act of decapitation. It was Harry who pointed out that the sword would work much better than an overlarge Frisbee. The scene now shows Harry swinging the sword, which slices through the neck, and the head lifts into the air

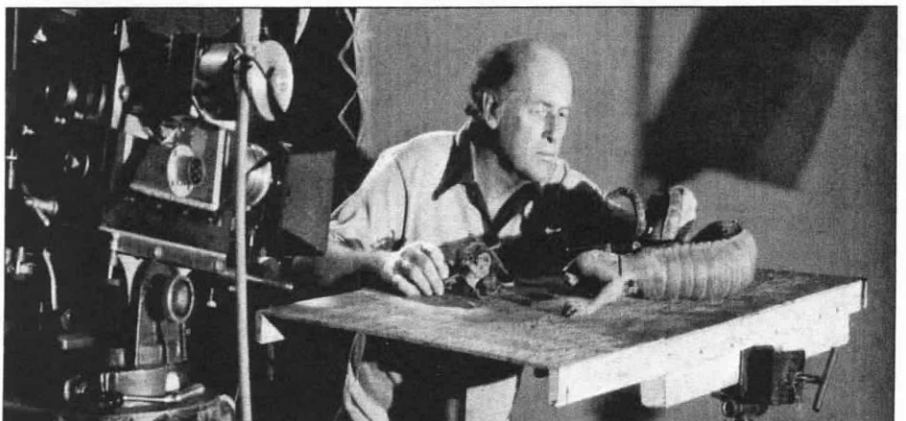
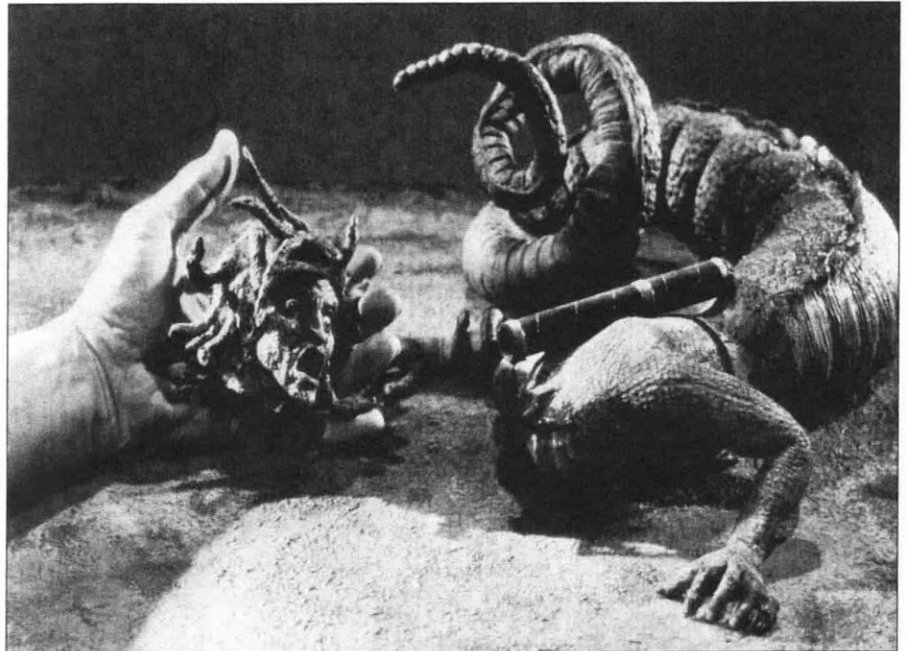
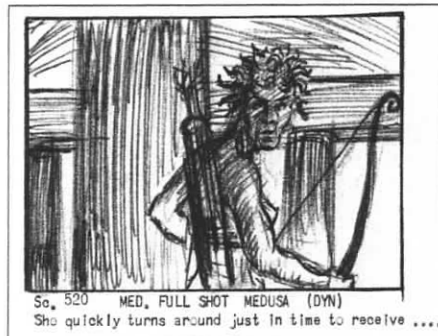
and tumbles out of shot. Using the same Medusa model as I had for the rest of the sequence, I detached the head at its neck armature joint and suspended it on wires. Thus I could animate it simultaneously with the torso. Once the sword has done its work, a reddish goo, her blood, pours from her neck. The goo was actually shot separately. We constructed a tube that would match the neck of the model and mounted it in front of black velvet. After mixing a red-tinted wallpaper paste, my assistant poured it down the tube so that it oozed out, and then matted it into the scene.

In her death throes Medusa manages to make a parting statement by scratching her nails down a nearby column. Suggested by Steve, it was an action and sound designed to send shivers down the audience's spine. We built a special miniature column out of cardboard, and as I animated the model's hand, I scratched the marks of her nails into the soft cardboard. It was the sound, of course, that made it seem like stone, added later by the sound department. At first they didn't quite get the proper effect. I kept telling them 'nails scratching on a blackboard' but the sounds they came up with were nothing like it. In the

end they got exactly the right resonance by scratching something on a blackboard. Strange how the obvious is sometimes the best way to achieve what you want.

There was just the one model of Medusa, 14 inches high and 24 inches long to the tip of the tail. She possessed 150 armatured joints and was large enough to allow us to shoot close-ups of her face, tail and lower body. Originally we had planned to build a large head for close-ups, but even though I hate to get too close to a model because it usually means we have to use bag filters, I decided that if we built one full model big enough, we should be able to get away with it. In the end my hunch was right and she looked good in close-up.

The Medusa sequence required enormous patience. It took days of animation to achieve apparently simple feats such as raising her arm to reach the bowstring and yet more days for the arrow to leave it. Then there were the natural actions of her arms, mouth, eyes and fingers, and the not so natural rattling of her tail. In addition, I had to continuously and convincingly animate the twelve tiny snakes on her head (twenty-four movements



**Above.** A section of the storyboard of the shield cutting off Medusa's head. Originally when I had executed these storyboards, the shield, with a serrated edge, was to have been thrown like a Frisbee across the chamber to slice off the Gorgon's head, but later this concept was changed to Perseus cutting off her head with his sword.

**Top and above.** Animating Medusa's decapitation. In the bottom still I am working on the model, which stands on the animation table. Behind is the rear projection screen (with no background image) and just out of the picture, behind the camera, is the disc that produced the flame flicker onto the model.



because the heads and tails were separate) and one on her arm. Like the skeletons and the Hydra, when there were so many movements required for each frame, it all got quite complicated to remember everything, particularly if I had drunk too much coffee and nature called.

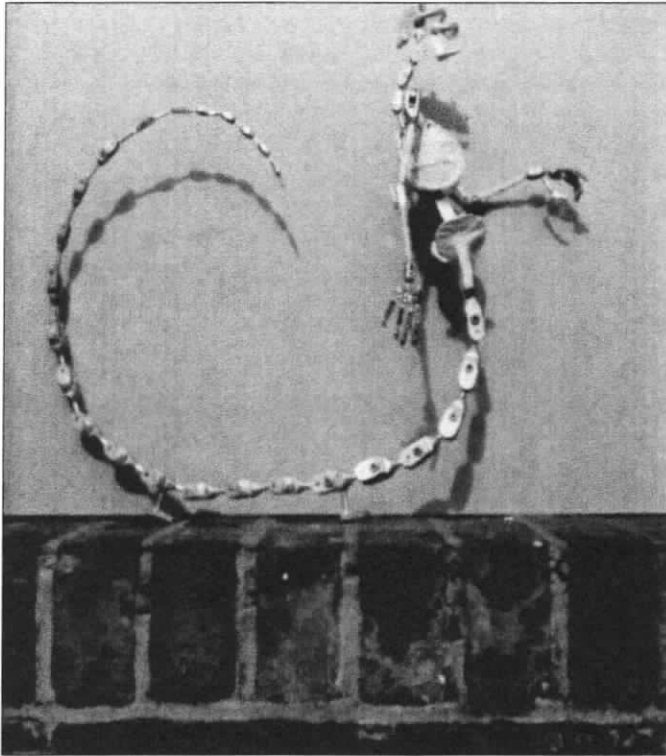
The Medusa sequence is perhaps the one I am most proud of. Everything in it – the model, the actions, the pace, the lighting – works so perfectly. As with most Dynamation sequences, I edited it myself, with perhaps a modification or two by the editor and Charles. The editing process would begin with the editor, who would rough cut the live action according to the script and continuity. During animation I would keep referring to this cut, and as I

completed the Dynamation scenes, I added them into the rough cut. Once everything was finished, I would then go through a process of refinement. When director Desmond Davis saw the completed sequence, he kindly called to congratulate me.

The film now moves to the return journey and Andromeda's rescue. Calibos, knowing the power of the Gorgon's blood, attempts to seek final revenge on Perseus, and whilst the exhausted men sleep, he punctures the bag containing the Medusa's head. Blood oozes onto the ground and from it appear a repellent combination of maggots and a trio of scorpions, the latter growing into huge, deadly creatures.

I had always wanted to design a sequence with scorpions but had never found a suitable opportunity,

even though they are wonderful antagonists and their crab-like legs and pincers are well suited to Dynamation. When we discussed possible sequences to fit into the Perseus legend, I suggested scorpions, an idea that fitted perfectly with what would become the final battle between our hero and Calibos. We built three 18-inch models embellished only very slightly with larger and therefore more menacing pincers. We studied and photographed the movement of several live ones, but either the lights made them languid or they would do the opposite of what we wanted. In the end I simply used my imagination, basing most of the movements on those of the crab. I completed the majority of the sequence early on in the animation



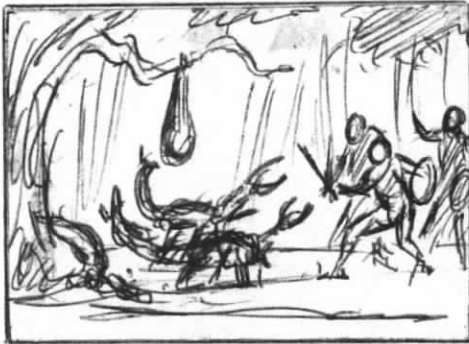
**Top left. Still of just the armature on the wall in my garden.** The Medusa armature possessed 150 armatured joints.

**Above. Medusa's eyes.** Some more shots of the lighting used for the head of Medusa.

**Top right. Still of model of Medusa.** There was just the one model of Medusa, 14 inches high and 24 inches long to the tip of the tail, and it was large enough to allow us to shoot close-ups of her face, tail and lower body.

**Right. Me with the prop Medusa Head.** The Medusa sequence is perhaps the one I am most proud of but the full size head was always a disappointment to me, as it didn't resemble the model's face. In any case, it did show what might happen to my actors and actresses if things didn't go according to plan.





Sc. 554A 558 ANOTHER ANGLE (dyn) PERSEUS & men are faced with the monster SCORPIONS.



Sc. 555 M.S. SCORPIONS (DYN) The huge creatures advance, their stinging tails clicking.



Sc. 555A. C.S. PERSEUS & GROUP They slash at the O.S. monsters.



Sc. 555B. C.S. SCORPIONS (DYN) They snap at the o.s. men.



Sc. 556. CALIBOS (DYN) He limps through the trees to scatter the horses with his whip.



Sc. 557. ANOTHER ANGLE (DYN) The first officer is stung to death.



Sc. 559. C.S. Men As they slash at the o.s. monsters.



Sc. 560. ANOTHER ANGLE (DYN) PERSEUS kills one SCORPION.. turns in pursuit of CALIBOS.

schedule, whilst I was still working alone. Generally, I like to get into a particular sequence and stick with it until it's finished, but because of the number of animated creations, I jumped around a bit at the beginning and filmed a little of each character, just to get a visual résumé of the picture as we were cutting it. Afterwards I would go back and complete the sequences.

I used the same zoom trick to produce the scorpions' rapid growth as I had for the wasp in *Sinbad and the Eye of the Tiger*, animating the model as I zoomed in with the lens. Only one model was used for the growth, shot at different angles with the zoom to make it seem as though there were three. To allow the men 'contact' with the scorpions I employed a few old tricks. The first has Tim Pigott-Smith cutting off a pincer. I choreographed Tim so that at a certain point he slashes down with his sword. With

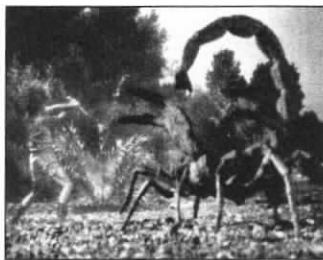
the model scorpion on the animation table and Tim projected on the rear plate, I timed the sequence by counting the frames, so that when Tim's sword came down, the scorpion's pincer was seemingly cut off. I detached the limb by cutting the latex and pulling apart the armature joint below the pincer, which I then suspended on wires so that it fell to the ground at the same speed as the action of the model. To give it a little extra realism at the moment of severance, I added a mixture of makeup blood and glycerine. I went through the same procedure when Perseus slices the sting from the tail of another creature. Later I reassembled the armatures and glued the latex, as I had done with Medusa's head.

The demise of the last scorpion is brought about by Perseus when he plunges his sword into the top of the creature's body. On the live-action plate Harry is plunging into nothing, but I had calculated

approximately where his hands should stop as if they had reached the skin of the creature. I stood the model in front of the rear projection screen, and as the real sword appears to enter the body, I replaced it with a miniature. I also animated a downward motion with the model to make it seem as if the sword was actually entering its body and pushing into it. During the scorpion fight, Calibos kills Tim Pigott-Smith's character by stabbing him in the back. This was done in basically the same way as I had filmed the fight in the swamp. On location we photographed Tim pretending to be held around the neck and then sinking to the ground as if he had been stabbed. Back in the studio I animated the model of Calibos in front of this location plate so that it seems as if he is holding Tim and stabbing him.

Finally Calibos and Perseus stand alone to fight one last battle. Using his whip, Calibos attacks Perseus. We see Calibos in the foreground with his back to the camera, and the whip lashing out at Perseus who appears on the background plate. It seems that the whip connects with the hand of Perseus, but of course it doesn't. Actually Harry held nothing, he simply positioned his hand as though he was pulling on a whip. I then animated the miniature whip (which had a wire inside and an aerial wire to support the tip) to match with Harry's hand. If his hand moved, I would match it with a corresponding movement in the whip. Perspective was vital, so I designed the whip with a taper, giving the illusion of

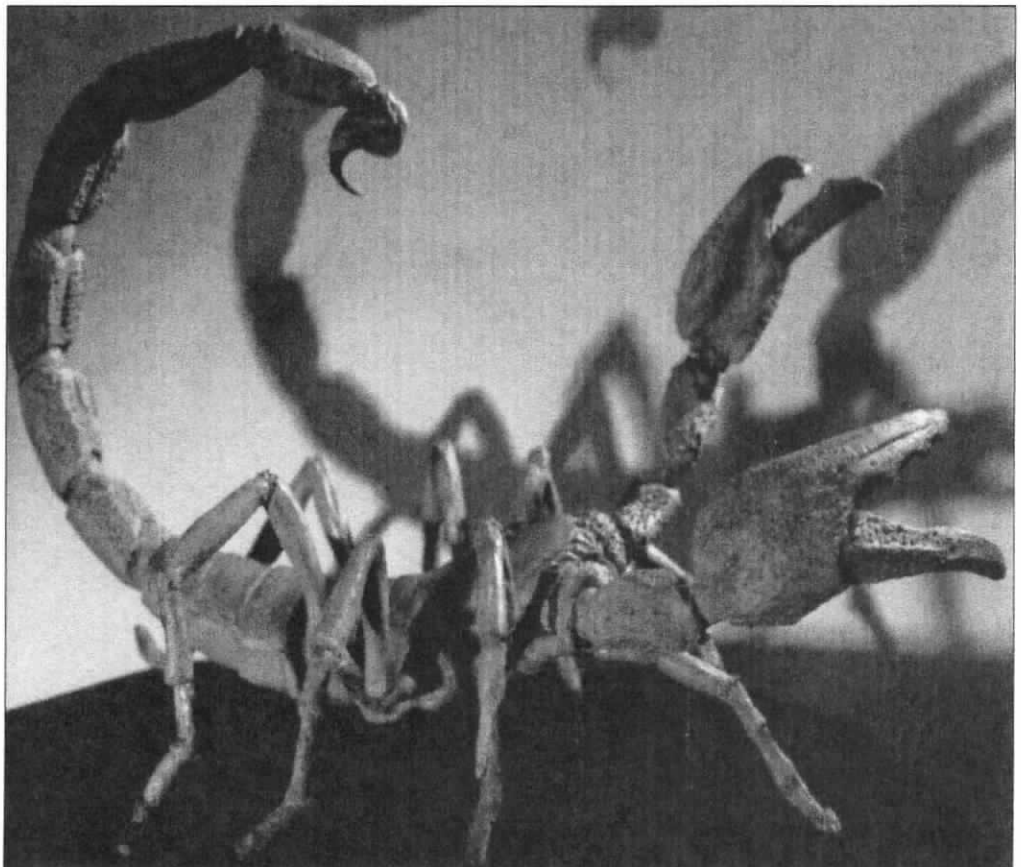
Although the live-action plates for the scorpion sequence were shot day for night, we were cursed with extremely bad weather, suffering long downpours that made everything look gloomy and overcast. The sequence was scheduled for the last day of the Italian shoot and the production was due to catch a specially chartered plane to Malta the next day, so I was faced with little or no room to manoeuvre. The sequence had to be photographed then or be dropped from the film, whether it was raining or not. Once back at the studio in England, I tried rebalancing the colour of the plates with an orange filter in the projector, and although it worked to some extent, the sequence looks murky and grainy. If I had been more temperamental, thrown my hat on the ground and jumped on it, I might have got another day's shoot. But it would have cost the company a lot of money to delay the cast and crew and I didn't want a confrontation. Some people might call that artistic crucifixion!



**Left hand page. The scorpion storyboard.** A section of the storyboard for the scorpion sequence showing their appearance from the blood of Medusa and how the early scenes were to be cut together.

**Above and above right sequence. Stills from the scorpion fight.** When we discussed possible sequences to fit into the Perseus legend, I suggested scorpions, an idea that fitted perfectly with what would become the final battle between our hero and Calibos.

**Right. Still of a scorpion model.** There were three models but I only used one for the growth of the scorpions, shot at different angles to make it seem as though there were three. They were combined into the one shot by means of a travelling matte.





So. 624 (Same as 604 FULL SHOT SACRIFICIAL ROCK The great KRAKEN appears between the (Dyn) rocks of the cove - face to face with ANDROMEDA. He glares down at her as she twists and turns in torment.



So. 625 Med CLOSE SHOT Men on rocks reacting.



So. 627 CLOSER SHOT KRAKEN & ANDROMEDA (DYN) As his huge head moves down into .....



So. 629 Cont. our view as camera pushes on ANDROMEDA.



So. 627 Cont. As the huge head moves down into our view - ANDROMEDA struggles with her chains. She turns away from him in terror.



So. 629 1/2 EXT. ROCK AND CLIFFS As PEGASUS (Dyn-Tm) appears with PERSEUS. He is still clutching the head of MEDUSA in the scarlet cloak.



So. 630 CLOSER MOVING SHOT PERSEUS & PEGASUS (DYN- TM)



So. 631 MD. SHOT THE KRAKEN - Watching - Suspicious. Ready.....

distance between model and man. Calibos is finally killed when Perseus manages to grab his sword and throw it into his opponent's stomach. Originally, I animated a shot of Calibos writhing in agony, but Desmond considered it a little too melodramatic.

The finale sees Perseus rescuing Andromeda by holding up Medusa's head and turning the Kraken to stone. Harry's hand is actually holding nothing, while the head was in fact a detached miniature, which I suspended in front of the rear projection plate of Harry by six wires, three at the top and three at the bottom, achieving absolute stability. As soon as the Kraken looks into Medusa's eyes, he turns to stone and crumbles back into the sea. To do this I made a special plaster replica of the model, constructed in sections, so that when it was shot at high speed, we could collapse it. We then inserted it into the scene with a travelling matte.

The sacrifice sequence has always seemed visually wrong. After all the other spectacular encounters, it seems to lack, amongst other things, a visual sense that we are witnessing the wrath of the gods. I did plan to add threatening clouds, giving the sequence a

dark and brooding effect, but it would have taken more time than the schedule would allow. Another element that always looked far too mundane was the full set, built on the edge of the sea tank in Malta. My first design for the sequence included people on the shore looking at the spectacle behind barriers, or half cages, to protect them from the beast. The idea was discarded in favour of people just standing there. It wasn't right. Perhaps another reason for my lack of enthusiasm for the sequence is that whilst I was shooting the animation, my hand slipped and hit a metal drill press, injuring my finger. It didn't even break the skin, but the next day, I couldn't bend the digit. As my fingers are the tools of my trade, I rushed off to the doctor who said it was only bruised. Even so, it was impossible for me to animate, so Steve took over the completion of the sequence. I must say he made an excellent job of it. For the next two or three weeks I attempted to busy myself with other tasks. As it got better, I did attempt some animation, but found it difficult without the full mobility of all my fingers. To this day I believe the doctor was wrong and that I had cracked a bone. I had never injured myself before

during production, so it is strange and fortunate that the one time I did, there were other animators to hand. Curiously, just before my accident Steve also injured his hand in a tripod and had to go to hospital.

After sixteen months of work (preceded by eighteen months of preparation) the animation was completed in mid-January 1981. Even then I didn't have time to rest. The next few months were spent in the editing room and then working in the capacity of associate producer alongside Charles to oversee the recording of the sound effects and score. Laurence Rosenthal's thrilling and soaring symphonic music adds so much to the picture, enhancing the action rather than dominating it. He seemed totally at home with fantasy. A perfect example of this is in his music for the capture of Pegasus. It is magnificent, highlighting exactly what I had in mind when animating and reflecting the essence of the struggle and ultimate conquest of the beast. His composition for the Medusa sequence was even better. The sound effects department had wanted to drop the music because they thought the sound effects of the rattle and the slithering on their own would be more



**Left hand page.** A section of the storyboard for the Andromeda sacrifice sequence. Once again it can be seen how closely the storyboard resembles the scene in the film.

**Above.** A still of sacrifice sequence. After all the other spectacular encounters, the sacrifice sequence seems to lack, amongst other things, a visual sense that we are witnessing the wrath of the gods. What I had intended was to shoot a special dark, threatening sky with lightning that would have been matted in behind the Kraken, but

time and money didn't allow for it. However, the end sequence would have been far less impressive without Laurence Rosenthal's music, which helped to bridge some of the sequence's inadequacies and lent it a spectacular feel.

effective. Good though the sound effects were, it needed Laurence's wonderful music. The end Kraken sequence would have been far less impressive without his music, which helped to bridge some of the sequence's inadequacies and lent it a spectacular feel. Laurence used to come down during the animation to get a feel for the creatures, whereupon I would impart the ideas running through my head. He knew exactly what we wanted and composed a score that was a perfect meld of fantasy, spectacle and romanticism. Between 28 November 1980 and 30 January 1981 the score was recorded with the London Symphony Orchestra, following which both Charles and I went straight into a long promotional campaign. This took us on a month's tour of America, to Europe and even Japan. The film finally opened in the US in June 1981 and in Europe the next month.

Most critics were kind to the film, with the best reviews coming from America. The *Pennsylvania Times* said, 'Those who love movie magic will thank heaven for *Clash of the Titans*! It's a magical experience!' The *Washington Star* commented, '*Clash of the Titans* is a welcome old-fashioned trek through an ancient world of Gods and Heros. That old master of fantasy, Ray Harryhausen, has finally been given full

rein to display his teeming imagination on the screen! It works!' and finally '*Clash of the Titans* is Ray Harryhausen's *Gone With the Wind*, wrote the *Bergen Record*, New Jersey. My favourite was the *Chicago Sun-Times*, where Roger Ebert wrote, '*Clash of the Titans* is the kind of movie they aren't supposed to be making anymore: a grand and glorious romantic adventure, filled with brave heroes, beautiful heroines, fearsome monsters and awe-inspiring duels to the death.' He went on to say the kindest comment about the effects: 'The real star of the movie, however, is Ray Harryhausen... when Perseus tames Pegasus, it sure looks like he's dealing with a real horse.' He concludes by saying, 'it is perfect as summer entertainment. It's a family film and yet it's not by any means innocuous: It's got blood and thunder and lots of gory details, all presented with enormous gusto and style. It has faith in a story-telling tradition that sometimes seems almost forgotten, a tradition depending upon legends and myths, magical swords, enchanted shields, invisibility helmets, and the overwhelming power of the kiss. I had a great time.' He knew what the film was all about, and most audiences seemed to agree with him, thank God. This approval was not shared by other reviewers, who could not see the adventure, fantasy and imagination. Perhaps they didn't have an

imagination, as some seemed to revel in tearing it apart, writing not only aggressive, but down right vicious and opinionated reports. When I came to read the *Variety* review where they called it 'an unbearable bore' with 'flat, outdated special effects', I became very disillusioned. I gave the film so much of myself that when it was vindictively and unconstructively torn apart, the passion of film-making seemed to die.

Following *Clash of the Titans*, Charles and I started to search for the next Dynamation subject. Several were considered, including two that would have returned to the Sinbad legend and a project called *Force of the Trojans*. Both were heavily researched and scripts written (see chapter 12), but there were no buyers. Even though *Clash* had proved itself at the box-office, the trend for fantasy had now shifted to the anti-hero with his passion for violence and mayhem, and our subjects were no longer considered commercially viable. The age of the hero was dead. *Clash* was destined to be my last picture, and looking back, the decision to end my career at that point was absolutely right. With all the problems involved in production, and the knowledge that I was losing precious control of solo animation, I was forced to concede that it was time to stand aside for others and their new



This page. Two examples of the artwork for the film poster.



Right hand page. My favourite artwork. This poster not only contains action and excitement, but also shows how good the cast was.

# An Epic Entertainment Spectacular!



## CLASH OF THE TITANS

Metro-Goldwyn-Mayer presents CHARLES H. SCHINDLER'S CLASH OF THE TITANS  
A MGM Production  
Produced by HARRY HAMILIN and JUDY BROWER  
Starring BURGESS MEREDITH · MAGGIE SMITH · URSULA ANDRESS · CLAIRE BLOOM  
SIAN PHILLIPS · FLORA ROBSON · LAURENCE OLIVIER  
Directed by CHARLES H. SCHINDLER  
Costume Designer RAY HARRYHAUSEN  
Cinematographer BEVERLY CROSS  
Music by JOHN BARRY  
Edited by DESMOND DAVIS

DOLBY STEREO

MGM

Presented by Metro-Goldwyn-Mayer

### COMING FOR THE SUMMER OF 1981

technology to take over. The industry was on the threshold of revolutionary changes, all of which I would have been unhappy with. CGI is a wonderful tool that continues to fascinate me, but I know, deep down, it would never have suited me. Perhaps my fate would have been significantly different if it had been CGI that had brought Kong to life. I might not have been so inspired and could have ended up as a plumber! The use of CGI is now so commonplace that almost all major (and some not so major) movies have embraced the technology and now it is overused. Three-dimensional stop-motion model animation created a fantasy world that was so rare.

The way the creatures moved encouraged a sense that one was watching a miracle, but when the miraculous becomes commonplace, the concept of the miracles cease to be miraculous. In any event, my time had passed: there would be no room for a maverick who worked on his own in a small back room making it up as he went along.

But the technology wasn't the only problem. It had become harder and harder for me during those last few pictures to sustain my enthusiasm. A despondency had crept in when it was time to begin working alone in my small animation studio. What had once sustained me during the tedium of animation, namely viewing the rushes to see if I had achieved what I wanted, ceased to be intriguing. I felt that it was time to call it a day. By the end of *Clash of the Titans* I had reached the grand old age of sixty-one, and had been working since I was a teenager. Moviemaking takes so much out of one's life. You have to live, eat and breathe pictures, not just during production, but before and after. I hardly saw my family during the endless months of production, and there eventually comes a point when you say, 'Is this worth it?'

Having said all that, I regret none of it. I love the films I was fortunate enough to have been involved with, and although the years spent on them were sometimes tiring, they were also fun. They were certainly not wasted years. How could they be? It is gratifying to know that my work bridged the years between Obie's pioneering work and the new science of computer special effects and that the films have given so many people so much enjoyment and inspiration. While I don't miss the stress and strain of moviemaking, I regret that I shall not now be able to put on celluloid some of the other creatures, lost lands and adventures still lurking in my imagination. It won't be me, but maybe one day someone will again have the courage to make a picture that is pure imagination and adventure with real heroes and villains, two of the greatest assets in the history of moving pictures, or for that matter, any visual storytelling. Once again, I should allow the gods the final word. In *Clash of the Titans* Hera asks of Zeus, her husband, 'What if one day there were other heroes like him? What if courage and imagination were to become everyday mortal qualities?' Zeus replies, 'We would no longer be needed. But, for the moment, there is sufficient cowardice, sloth, and mendacity down there on Earth to last forever.' Perhaps this might suggest that I really do have a Zeus complex!



**Above. Perseus and his shield.** Harry Hamlin made a good Perseus. He was not only a good actor, but also looked the part and was certainly better than Arnold Schwarzenegger, who had been suggested for the role during the early days of the project.



# **RAY HARRYHAUSEN**

## AN ANIMATED LIFE

**RAY HARRYHAUSEN  
&  
TONY DALTON**

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**BILLBOARD BOOKS**

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