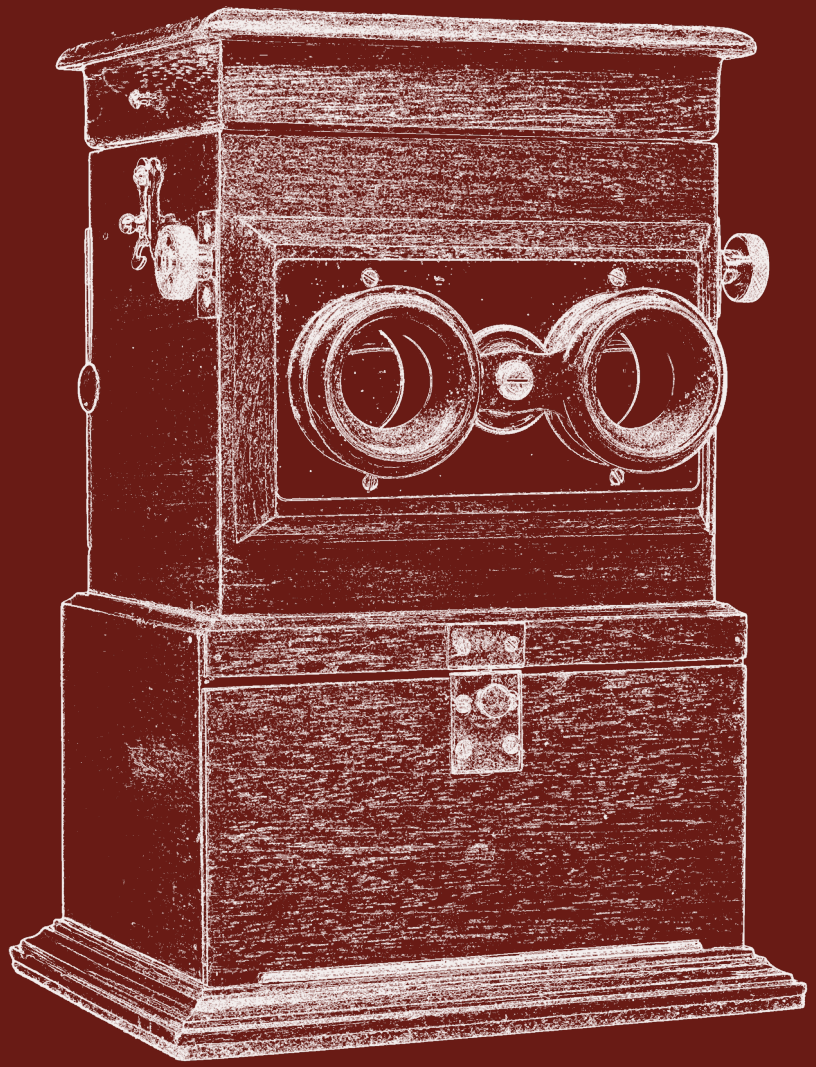


Stereoscopy History Series

Designers & Manufacturers

Lucien Bize

ANDRÉ RUITER

Lucien Bize

A French engineer who introduced a number of innovative and compact stereoscopes that vanished in the wake of the First World War.

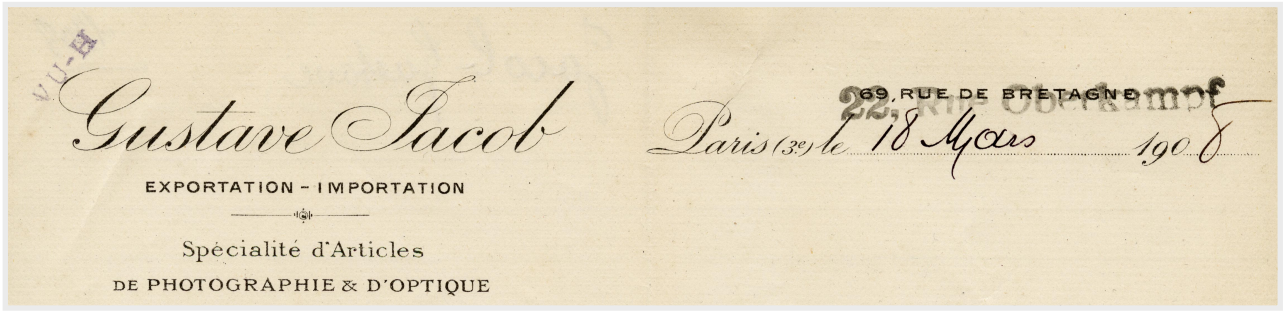
The *Stereoscopy History Series* explores the history of stereoscopy in Europe between 1850 and 1930, unveiling the stories of the people, companies and their remarkable instruments and images that captured the imagination of an era.

Lucien Bize

Lucien Bize was an engineer who studied at the renowned École Centrale Paris[1]. Around 1896, he took over the company of Gabriel Plessy, a manufacturer of aluminium[2]. Bize's workshop was from 1903 located at 69, Rue Oberkampf in Paris[3]. In 1904, he designed and patented L'Omnium, a compact hand-held stereoscope. From the same period date Le Bloc-Omnium, a basic multi-view stereoscope for paper stereoviews, and La Jumelle Lux. These first stereoscopes shared the characteristic of being made of metal.

Bize collaborated with Siméon Louis Claparède in 1905[4]. Together, they patented a design for an innovative multi-view stereoscope that stood out for its simplicity. This stereoscope was named Le Minimus and could display multiple glass stereoviews in succession without the use of a complex mechanism. During the introduction of Le Minimus in 1907, Bize and Claparède were employed as engineers by Gustave Jacob[5], who exclusively managed the marketing and sales of the stereoscopes[6]. Le Minimus was introduced simultaneously with the related Multiphote and Le Phénix, a compact revolving stereoscope[7]. Around 1910, another multi-view stereoscope followed: Le Polyphote[8].

Jacob's company went bankrupt in 1911[9], after which Bize continued independently as manufacturer of stereoscopes. However, in 1913 he sold his company to Robert Pleyau[10]. Bize remained active as engineer and mechanic, but he was likely no longer involved in the stereoscope business. Pleyau introduced L'Astra in 1913, which was based on Bize's last patent.



When the First World War broke out in 1914, Pleyau was called up for the French army[11]. Nevertheless, he managed to keep his business running[12] and he produced stereoscopes for the Allied forces[13]. Pleyau sold part of his business to E. Brose et Cie in 1917. It is unclear which activities were sold, but after the war, Bize's stereoscope designs no longer appeared in advertisements or catalogues. In 1921, a certain E. Bertrand was mentioned as "Ancienne Maison Lucien Bize", but his business activities were certainly not related to the manufacturing of stereoscopes[14]. It therefore seems that the production of the stereoscopes ceased during the war.

After the war, Pleyau expanded his business, and he established three more branches in Paris. In 1926, he was sentenced to six months in prison for "Abus de confiance" (breach of trust), and his company was declared bankrupt[15, 16].

La Nature, 22 February 1908

Companies and people

	Lucien Bize	**Gustave Jacob**	**Robert Pleyau**
Duration	c. 1896–1913	c. 1903–1911	1913–1926
Addresses in Paris	44, Rue Oberkampf (c. 1896–c. 1903) 69, Rue Oberkampf (c. 1903–1913)	14, Rue Lancry (c. 1903–c. 1906) 69, Rue de Bretagne (c. 1906–c. 1908) 22, Rue Oberkampf (c. 1908–1911)	69, Rue Oberkampf Other branches in the 1920s: 46, Rue de Vanves 9, Rue Pasteur 185, Route de Flandre
People	Lucien Albert Bize * 18-07-1866, Noyers † 24-04-1960, Moings Ingénieur École Centrale Paris (1888)	Gustave Jacob *(no birth or decease information)*	Robert Hippolyte François Pleyau * 02-07-1883, Loiret † 17-06-1978, Orléans

69, Rue Oberkampf

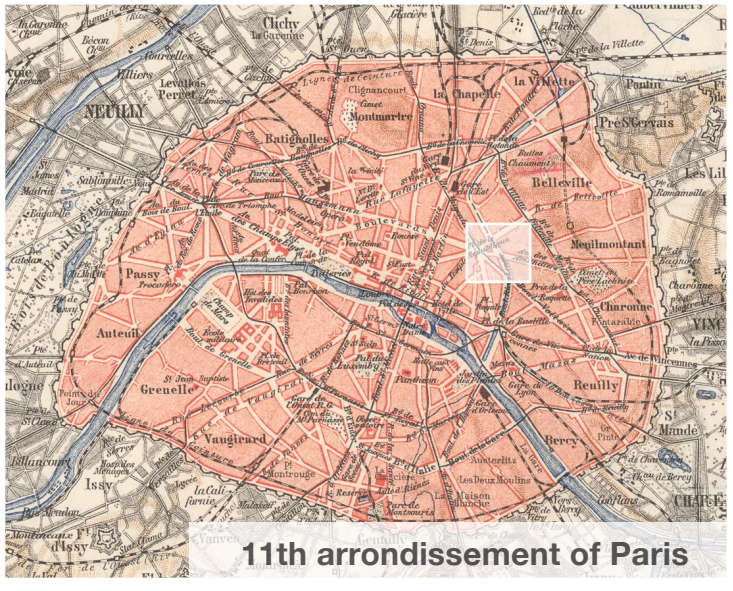
Lucien Bize / Robert Pleyau

22, Rue Oberkampf

Gustave Jacob

44, Rue Oberkampf

Lucien Bize



L’Omnium

This stereoscope is made of metal. The panel with the lenses and the holder for the stereoviews are foldable. The handgrip can be unscrewed from the viewing section. When disassembled, the set can be stored in a sturdy case, usually in burgundy or black. This case has ensured that many Omnium stereoscopes have survived in good condition to this day, often still accompanied by their original manual.

The first version of L’Omnium is designed for paper stereoviews in various formats. The Omnium III is intended for glass stereoviews in the formats 45 x 107 mm and 6 x 13 cm and is equipped with a ground glass to soften transmitted light. The numbering suggests an Omnium II, but this viewer does not seem to exist. It may refer to the variant fitted with rectangular prism lenses instead of the default round ones.

Some Omnium stereoscopes are packaged in a case bearing the name Julian Damoy. It is often assumed that this is the manufacturer, but Damoy was in fact a grocer in Paris who distributed L’Omnium under his own name as part of a marketing campaign.

L’Omnium and storage case.

L’Omnium with rectangular prism lenses, stored in its case.

STÉRÉOSCOPE OMNIUM

Breveté S. G. D. G.

MODE D’EMPLOI

Prendre le manche de la main droite et le stéréoscope de la main gauche, introduire le téton **A** dans le tube carré **B** en poussant bien à fond. Ceci fait, il suffit pour ouvrir l’appareil, après avoir lâché la main gauche, d’appuyer avec le pouce de la main droite sur le bouton **C** qui forme ressort.

Pour la mise au point, après avoir placé la carte, tourner la molette **D**. jusqu’à ce que la vue soit bien nette.

Julien Damoy

Jean-Baptiste Julien Damoy (1844–1941) was a French grocer. In 1889, he opened a large grocery store at 31, Boulevard de Sébastopol in Paris. In the years that followed, his business expanded with new factories and additional shops.

Damoy launched a clever marketing campaign in 1904. Customers who purchased 500 grams of chocolate from Damoy's brands La Tasse or Le Select received a free 9 x 14 cm paper stereoview along with a coupon[17]. These coupons could be collected and exchanged for Le Deley's Merveilleux stereoscope or Bize's Omnium.

One of Damoy's grocery shops.

L'Omnium in a Damoy labelled box.

Paper stereoview with an image of Damoy's factory.

La Jumelle Lux

This stereoscope has a binocular-style appearance. The black body is covered with faux leather, although there are also luxury editions in silver with burgundy faux leather. The viewer is designed for glass stereoviews, with models available for the 45 x 107 mm and 6 x 13 cm formats.

La Jumelle Lux 45 x 107

Luxury edition

© Collection Martiné

Le Minimus

This unique multi-view stereoscope is designed for viewing glass stereoviews and operates without the use of a complex mechanism.

The lid on the top of the viewer can be removed. The glass slides are placed in the upper section of the viewer, which is fitted with grooves and can hold up to 24 slides. The slides rest on the viewing section with the lenses. By turning the side knobs clockwise, the viewing section moves forward, sliding out of the wooden structure. This action causes the base beneath the rear slide to drop, allowing the image to fall into position in front of the lenses for viewing. Turning the knob further causes the slide to drop down into the lower compartment of the housing.

In this way, all the loaded slides can be viewed in sequence. When viewing is complete, the stereoscope is inverted. The slides fall back into their starting position, and by turning the knobs counter-clockwise, the viewing section retracts into the housing, once more serving as the “base” beneath the slides.

Instead of loading all slides one by one, wooden trays were available to store collections and to load the slides into the viewer.

Le Minimus 45 x 107 with the top lid removed. The viewing section has already been slid out of the housing, and the rear glass images have dropped down into the lower compartment of the housing.

Le Minimus 45 x 107 with a retailer's nameplate of Photo Bachelier from Épinal.

Wooden trays were available both for storing collections and for loading Le Minimus. The viewer is placed upside down on top of the box. By rotating the box with the viewer through 360 degrees, the glass slides drop into place inside the viewer.

Le Multiphote

The mechanism of Le Multiphote is identical to that of Le Minimus, but the viewer offers support for a slide tray to collect the viewed images.

After loading the glass slides via a tray into the upper compartment of the viewer, the empty tray is placed in the lower section of the housing. After viewing an image, the slide drops down and is collected in the tray. This procedure eliminates the need to invert the viewer to unload the slides after viewing, as required with Le Minimus. The use of a tray to catch the slides makes Le Multiphote somewhat larger than Le Minimus.

Le Multiphote 45 x 107

Loading the slides from the tray.

Le Stéréo-Multiphote

Ce nouvel appareil permet de voir d'une façon simple et sans aucun mécanisme des séries de 24 vues 45×107.

Les vues sont placées une fois pour toutes dans le tiroir T qui est au bas du Stéréoscope.

Lorsque l'on veut se servir de l'appareil on enlève le couvercle C et, retirant le tiroir au moyen du bouton B, on vient le poser à la place du couvercle, puis on tire le petit anneau A qui est fixé après un faux fond du tiroir. Les vues tombent alors mathématiquement dans l'appareil. On remet alors le tiroir en place, en ayant bien soin de repousser le faux fond et le Stéréo-Multiphote est prêt à fonctionner.

En tournant doucement la molette M. les vues viennent successivement devant les yeux. Il suffit de mettre au point au moyen de la vis de réglage V sur la première vue.

En continuant à tourner doucement la molette M toutes les vues passent à leur tour et viennent de nouveau se mettre dans le tiroir dont il est parlé plus haut. Lorsque tous les positifs sont passés devant les yeux, tourner la molette M à l'envers pour faire rentrer la coulisse porte-oculaires.

Dans le cas où l'on veut voir d'autres séries de vues, il suffit d'avoir des tiroirs supplémentaires qui tous peuvent contenir 24 positifs. On remplace alors le tiroir qui vient de servir par un de ces derniers et l'on recommence l'opération comme il vient d'être dit, tous les tiroirs étant interchangeables.

Observation importante. — Bien vérifier en ouvrant la petite porte qui se trouve derrière l'appareil, que tous les clichés sont bien placés dans les tiroirs après chaque opération.

The manual is pasted inside the lid.

Le Phénix

It is the rarest of all Bize's stereoscopes. Le Phénix is a revolving stereoscope for glass stereoviews. The viewer was introduced in 1907 and featured a belt for 48 stereoviews in the 45 x 107 mm format. Later, a model for 60 slides was introduced, and another version became available for the 6 x 13 cm format. Le Phénix may well be the most compact revolving stereoscope ever produced. The dimensions of the 45 x 107 model are 18.5 x 18.5 x 36 cm.

Le Phénix contains a belt fitted with wooden grips, into which detachable metal holders with stereoviews can be placed. The belt is supported by a metal bar. By turning the knobs on the bar, the belt rotates and the images are displayed one by one. A handle on the belt allows it to be lifted from the device. Once the left knob is loosened, the bar can be pulled out, enabling the belt to be replaced with a new one.

At the back, a fold-out mirror can be positioned to direct light onto the images for optimal illumination.

Le Phénix 45 x 107

The belt with holders and the metal bar removed from the viewer.

Le Polyphote

Le Polyphote shares similarities with tray-based stereoscopes from other manufacturers, such as the Hemdé series and Richard's Taxiphote. However, Le Polyphote is considerably more compact. The dimensions of the model for 45 x 107 mm stereoviews are 23.5 x 17 x 31.5 cm.

A tray holding 25 glass slides is placed on a toothed rail inside the device. When a key-shaped knob on the right side is turned counter-clockwise, a slide is lifted from the tray by two metal fingers from below. The slide is now positioned in front of the lenses. Turning the knob clockwise returns the slide to the tray and advances the tray over the rail to load the next slide. A round button on the left side allows the tray to move freely over de rail to navigate to a specific slide. On the right, a fold-out plate with a small mirror is used to read the number on the tray of the loaded slide.

A small cabinet at the bottom of the device provides storage space for one slide tray. The storage cabinet can be accessed from the rear of the device. An optional accessory is a holder ("socle basculeur") on which the viewer can be placed. This holder can be tilted to create an oblique viewing angle.

Le Polyphote 45 x 107

Le Polyphote 45 x 107

L’Astra

At first glance, L’Astra appears to be an enlarged version of Le Polyphote, but it introduces new functions that necessitate a larger construction. The viewing mechanism operates in much the same way as in Le Polyphote, but instead of a toothed rail, a grooved slide tray is moved forward by a gear. The key-shaped knob has been replaced by a crank.

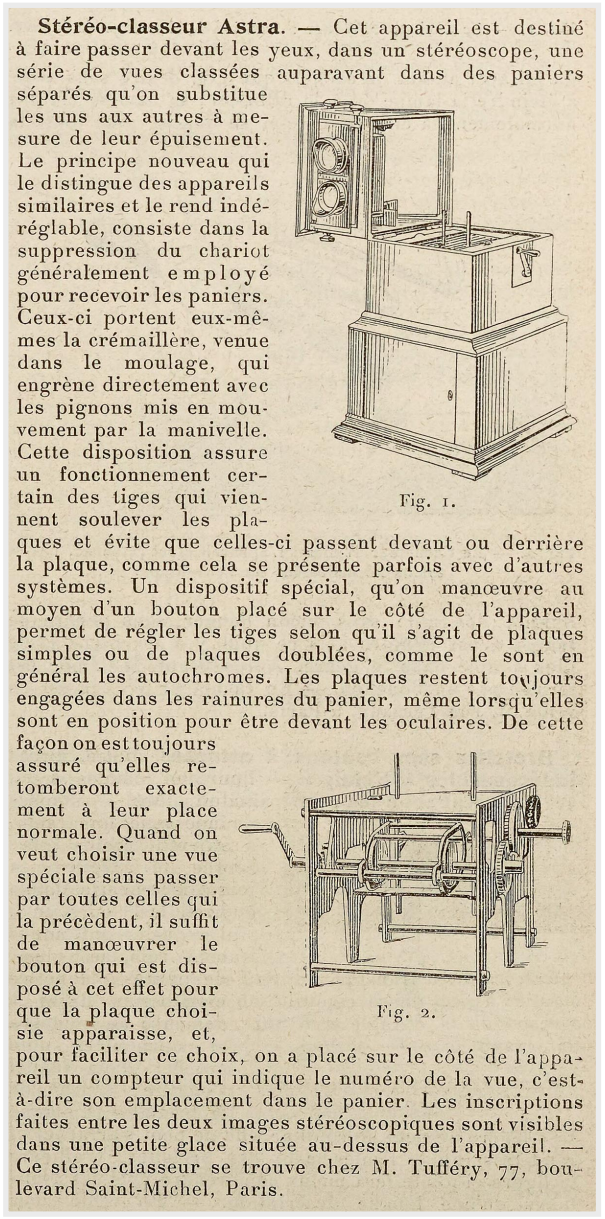
An additional frosted glass plate inside the device can be removed to accommodate a projection unit or lamp. This is the main reason for L’Astra’s increased size. The viewer could optionally be supplied with a detachable storage cabinet.

Some Astra models support the viewing of autochromes. Autochrome slides are thicker, which require an adjustment of the mechanism to enable viewing. Astra models that support autochromes feature a button on the left side that can be pulled out. In this position, and after a full turn of the crank, the slide tray is moved over a greater distance to accommodate the thicker slides. A standard slide tray holds 24 slides, while an autochrome tray holds only 12. The support for autochromes was Bize’s last patented design.

L’Astra 6 x 13

The mechanism of L'Astra is described in *La Nature* of 6 December 1913:

> …The new design, which distinguishes it from similar devices and makes it foolproof, consists in the elimination of the carriage generally used to place the slide trays…
> This ensures the operation of the finger which lifts the slides and prevents them from passing in front of or behind the slide, as sometimes happens with other systems. A special feature, operated by means of a button placed on the side of the device, allows the finger to be adjusted depending on whether there are single slides or double slides, which are generally autochromes. The slides always remain engaged in the grooves of the tray, even when they are in position to be in front of the eyepieces. In this way we are always assured that they will fall exactly into their normal position.



Stéréo-classeur Astra. — Cet appareil est destiné à faire passer devant les yeux, dans un stéréoscope, une série de vues classées auparavant dans des paniers séparés qu'on substitue les uns aux autres à mesure de leur épuisement. Le principe nouveau qui le distingue des appareils similaires et le rend indéréglable, consiste dans la suppression du chariot généralement employé pour recevoir les paniers. Ceux-ci portent eux-mêmes la crémaillère, venue dans le moulage, qui engrène directement avec les pignons mis en mouvement par la manivelle. Cette disposition assure un fonctionnement certain des tiges qui viennent soulever les plaques et évite que celles-ci passent devant ou derrière la plaque, comme cela se présente parfois avec d'autres systèmes. Un dispositif spécial, qu'on manœuvre au moyen d'un bouton placé sur le côté de l'appareil, permet de régler les tiges selon qu'il s'agit de plaques simples ou de plaques doublées, comme le sont en général les autochromes. Les plaques restent toujours engagées dans les rainures du panier, même lorsqu'elles sont en position pour être devant les oculaires. De cette façon on est toujours assuré qu'elles retomberont exactement à leur place normale. Quand on veut choisir une vue spéciale sans passer par toutes celles qui la précèdent, il suffit de manœuvrer le bouton qui est disposé à cet effet pour que la plaque choisie apparaisse, et, pour faciliter ce choix, on a placé sur le côté de l'appareil un compteur qui indique le numéro de la vue, c'est-à-dire son emplacement dans le panier. Les inscriptions faites entre les deux images stéréoscopiques sont visibles dans une petite glace située au-dessus de l'appareil. — Ce stéréo-classeur se trouve chez M. Tufféry, 77, boulevard Saint-Michel, Paris.

Fig. 1.

Fig. 2.

La Nature, 6 December 1913

Source: gallica.bnf.fr

Bibliothèque Nationale de France

An opened Astra 6 x 13 stereoscope with the slide tray visible.
Pulling out the small silver knob activates the autochrome-mode.

This Astra 45 x 107 features a fold-out mirror on the top of the viewer, allowing the titles of the stereoviews to be read.

© Collection Martiné

Multicolore

This hand-held stereoscope is supplied with three colour filters to alter the tint of the glass stereoviews during viewing. It is uncertain whether the stereoscope was made by Bize (or Pleyau), but notably, the black front panel—with the focus knob positioned between the lenses—is identical to that of Le Minimus and Le Multiphote. This construction appears to be a distinctive feature of Bize stereoscopes. However, no source has yet been found that confirms a direct link between Bize and this viewer.

Multicolore 45 x 107

Hand-held stereoscopes

Name	Stereoview support	Format	Lens focus	Ocular adjustment *	Introduction
L'Omnium	Paper	Multiple formats	Yes	No	1904
L'Omnium III	Glass	45 x 107 mm and 6 x 13 cm	Yes	No	1904
La Jumelle Lux	Glass	Models for 45 x 107 mm and 6 x 13 cm	Yes	No	c. 1905

* This feature allows the distance between the two eyepieces to be adjusted to accommodate different eye widths.

Multi-view stereoscopes

Name	Mechanism	Stereoview support	Format	Number of views	Lens focus	Ocular adjustment	Introduction
Le Bloc-Omnium	Revolving	Paper	9 x 14 cm	100	Yes	No	c. 1906
Le Minimus	Fall motion	Glass	Models for 45 x 107 mm and 6 x 13 cm	24	Yes	No	1907
Le Multiphote	Fall motion	Glass	Models for 45 x 107 mm and 6 x 13 cm	24	Yes	No	1907
Le Phénix	Revolving	Glass	Models for 45 x 107 mm and 6 x 13 cm	48 or 60	Yes	Yes	1907
Le Polyphote	Tray-based	Glass	Models for 45 x 107 mm and 6 x 13 cm	25 (45 x 107) 20 (6 x 13)	Yes	Yes	c. 1910
L'Astra	Tray-based	Glass	Models for 45 x 107 mm and 6 x 13 cm	24	Yes	Yes	1913

Patents

Number	Title	Filing	Publication	Applicants	Application
FR340728	*Stéréoscope-monocle-loupe*	26-02-1904	19-07-1904	Lucien Bize	Omnium
FR374970	*Stéréoscope*	23-02-1907	27-06-1907	Lucien Bize, Siméon Louis Claparède	Minimus and Multiphote
FR463687	*Stéréoscope classeur*	23-12-1912	02-03-1914	Lucien Bize	Mechanism for Astra

Notes and references

1. *Annuaire de l'Association amicale des anciens élèves de l'École centrale des arts et manufactures* (1889), p. 318.
2. *Annuaire-almanach du commerce* (1896), p. 1719.
3. *Bulletin municipal officiel de la Ville de Paris* (08-04-1903), p. 1324.
4. *Les Inventions illustrées* (19-11-1905), p.3.
5. *Le Soleil* (15-12-1908).
6. *Le Journal* (21-09-1906).
7. *Le Gaulois* (29-07-1908).
8. In a seen advertisement from 1910 it is announced as novelty.
9. *La Lanterne* (13-03-1911).
10. *L'Information photographique* (1913), p. 175.
11. Robert Hippolyte François Pleyau, *Registres matricules du recrutement (1887-1921)* via: archives.paris.fr.
12. *L'Intransigeant* (1916). "A mechanic is urgently required at Mr. Pleyau, 69, Rue Oberkampf, Paris".
13. Routine Orders 3rd Army (British Army) 31 October 1917. "1227 – Pleyau Stereoscope. Approval is given for the issue of one Pleyau Stereoscope to each Special Coy. ".
14. *Annuaire du commerce Didot-Bottin* (1921), p.137.
15. Charles Franjou, *Robert Hippolyte François* via: geneanet.org.
16. *Le Radical* (13-03-1926).
17. *L'Écho du Nord* (24-03-1904).

Revisions

1.3	13-09-2025	Page with wooden tray Minimus added
1.2.2	20-08-2025	Map update
1.2.1	06-08-2025	Minor text corrections
1.2	06-08-2025	Bize's date of death added
		Images of Astra 45 x 107 added
1.1	03-08-2025	Update Minimus and Multiphote. New image added.
1.0	02-08-2025	First edition

Special thanks to Pascal Martiné, who shared his knowledge and images from his collection.

Website: stereoscopyhistory.net