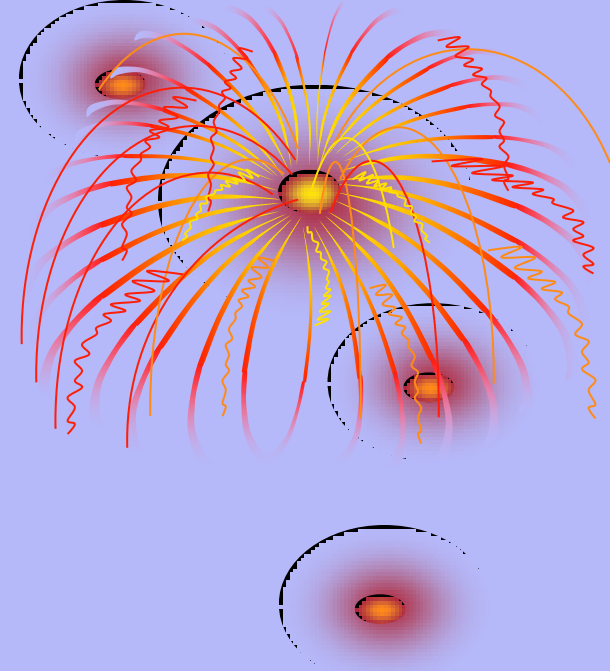


Nostalgic Beauty of Celluloid



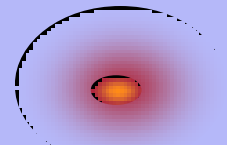
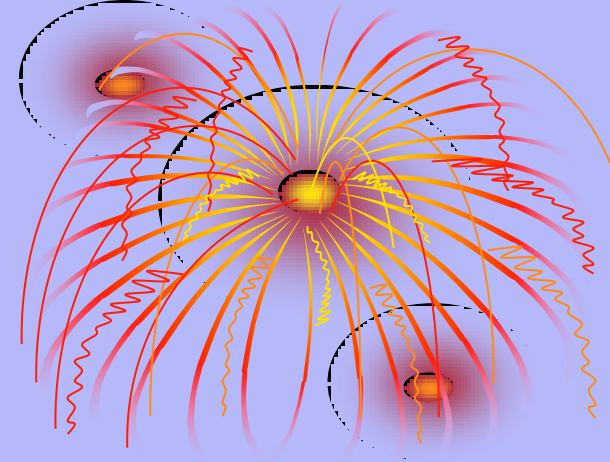
Isao Iwai
Celluloid Library · Memoir House
Yokohama Museum

Introduction

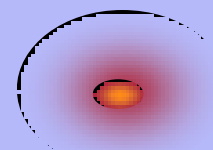
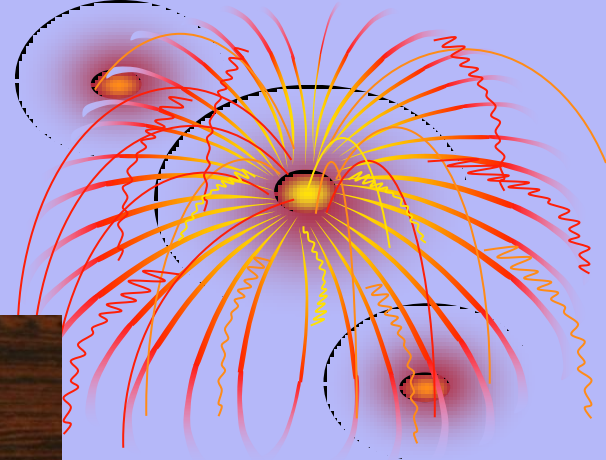
It is great pleasure to introduce our museum and activity.

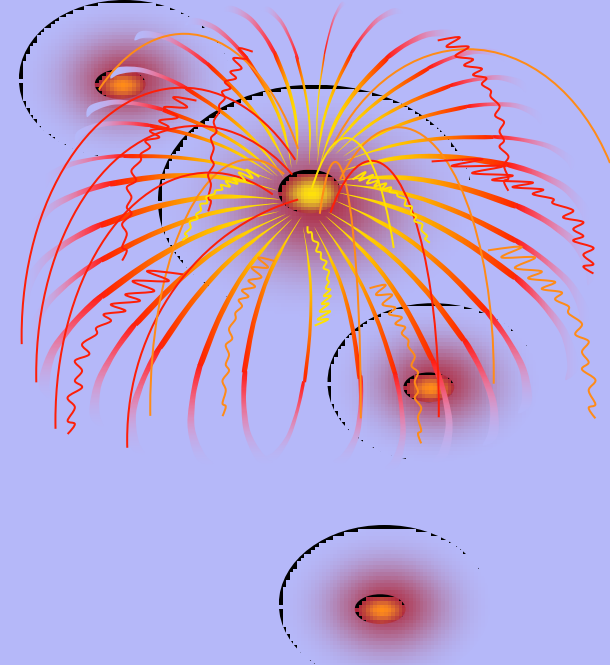
Our Museum is collecting various kinds of celluloid including industrial articles, household items, toys and dolls, office goods such as pens, knives and scales, charms as well as tiny boxes and cosmetic containers produced by celluloid.

These celluloid collectibles remind us how celluloid had been widely marketed and appreciated by the society.



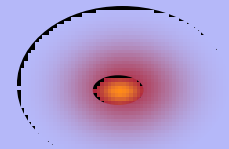
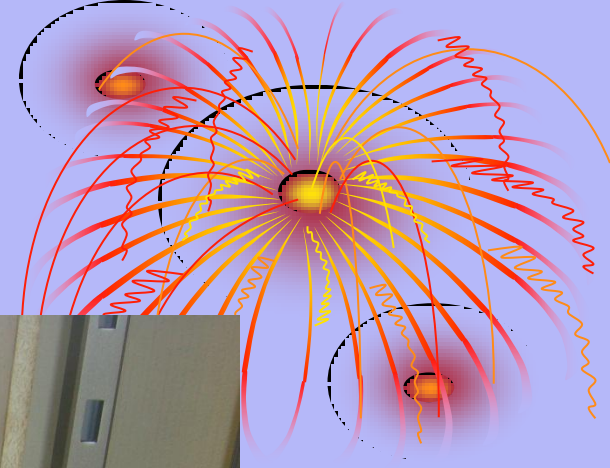
Various colours of typical celluloid



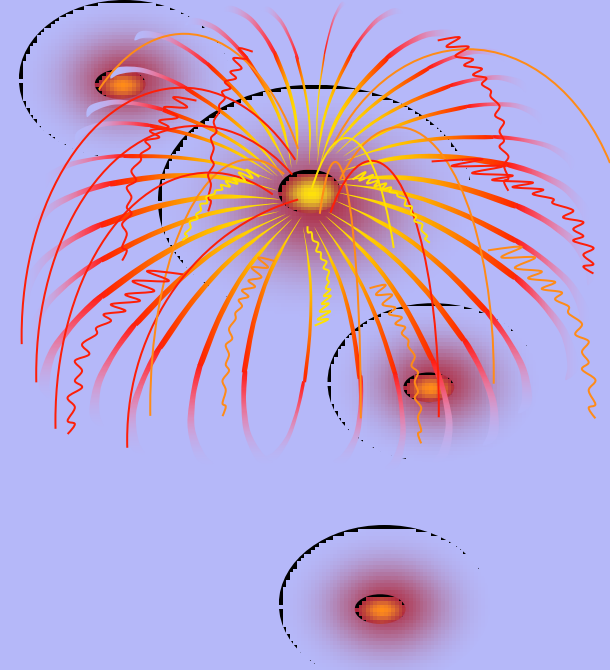


**Celluloid collectibles
of Museum was
introduced in Journal
of Chemistry &
Chemical industry,
Volume 2, February
2007**

Fashion Goods



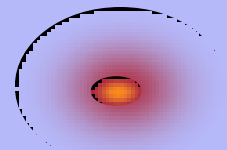
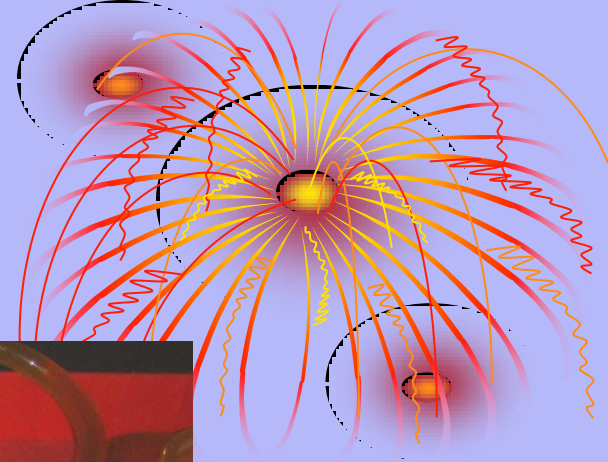
Fashion Goods



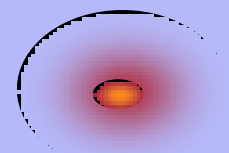
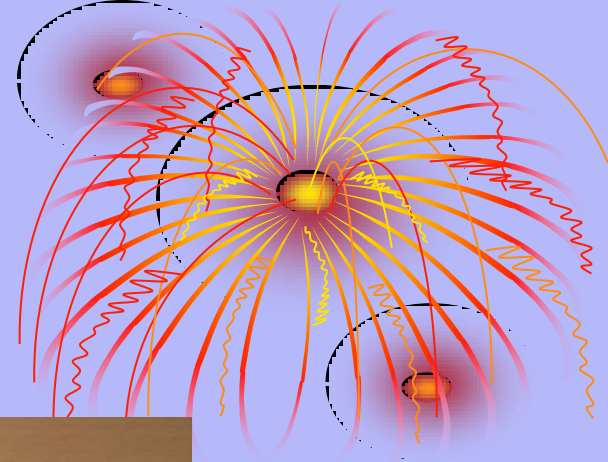
These hair accessories were used by Japanese Females in the past decades.

These are artistically taken highly of by people.

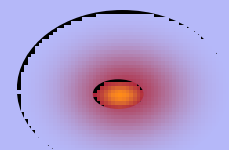
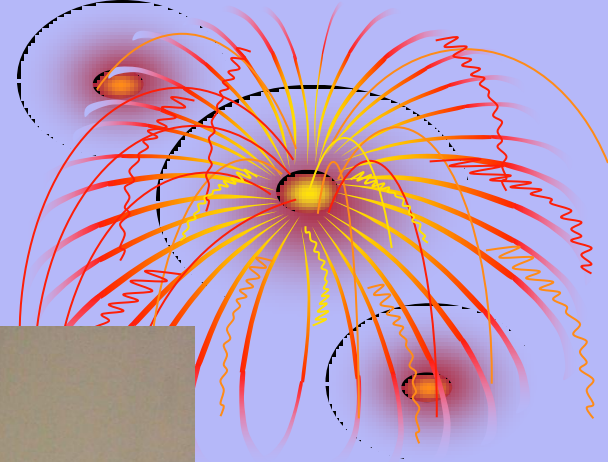
charms



charms



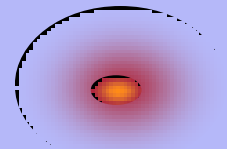
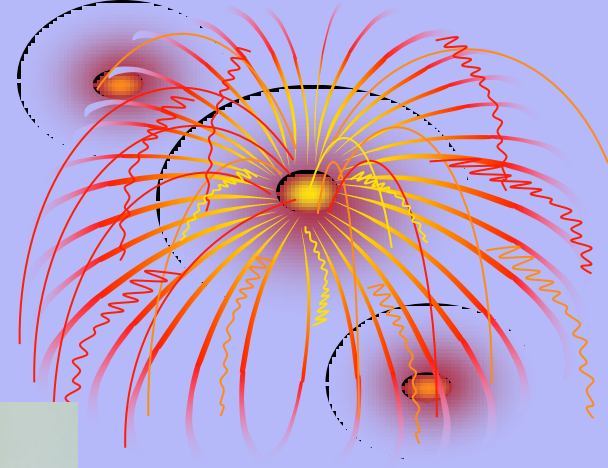
Beauty Boxes



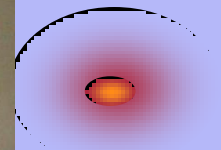
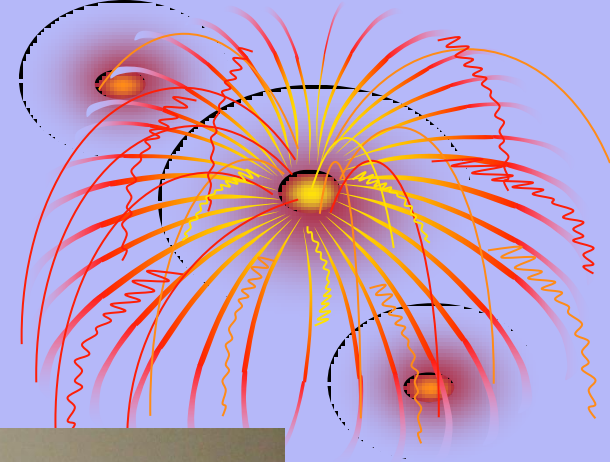
A Ivory-like Artificial Figure



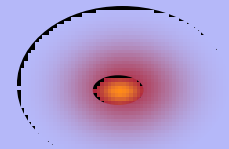
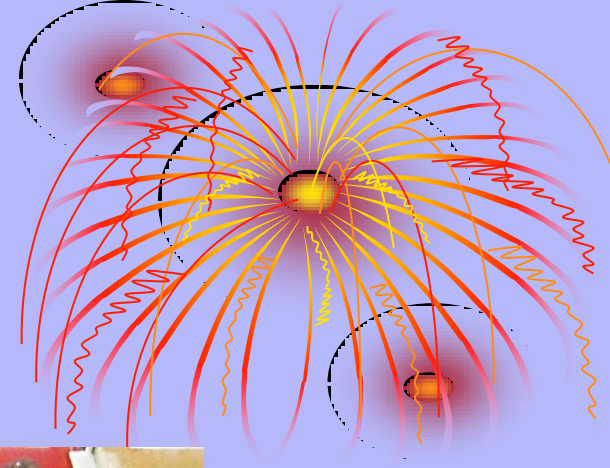
A Ivory-like Artificial Figure



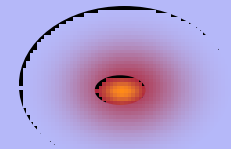
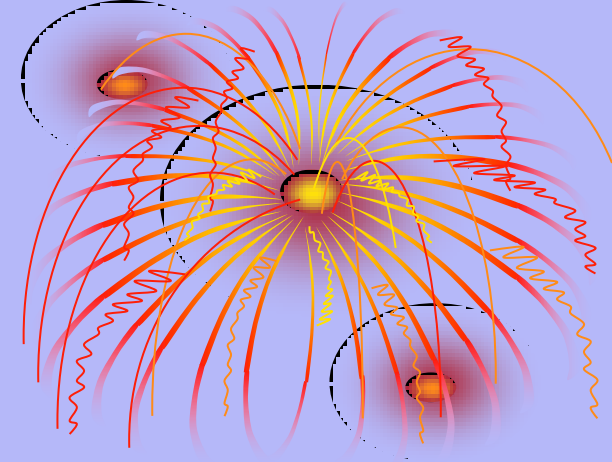
Celluloid Artificial Figure of Ship



Celluloid Button

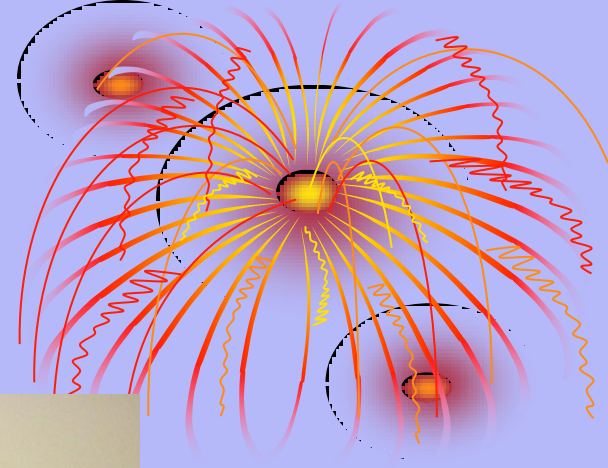


Celluloid Game machine (Pachinko)

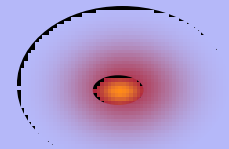
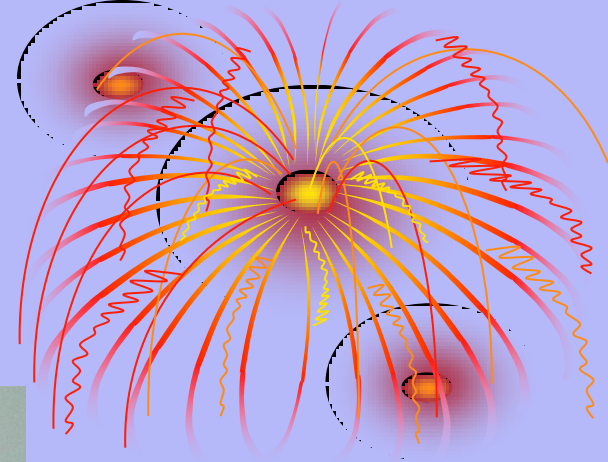


**Pachinko is a
Japanese pinball
game and popular
in Japan.
People enjoy this
game.**

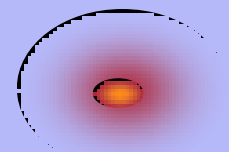
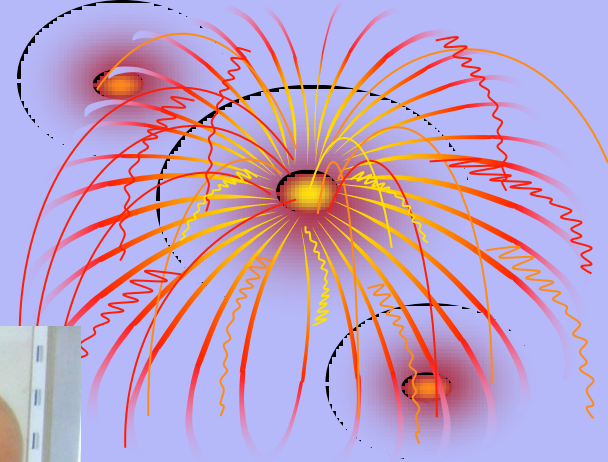
Celluloid Toys and Dolls



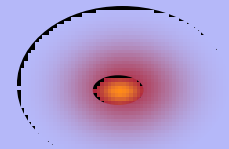
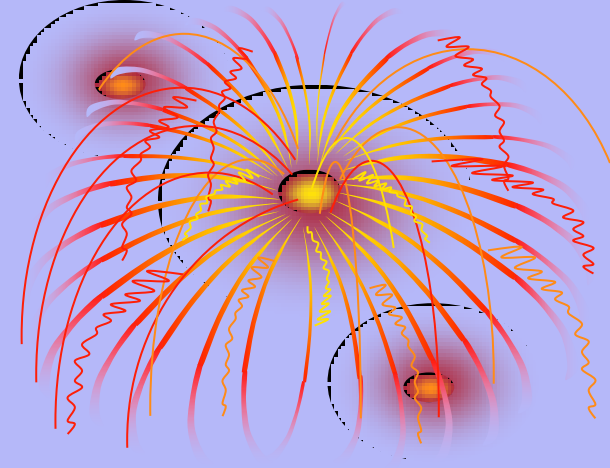
Celluloid Dolls



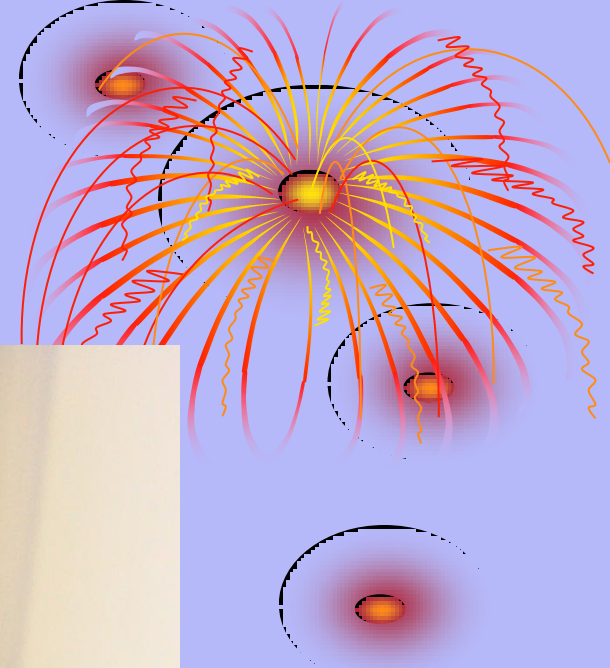
Celluloid Dolls



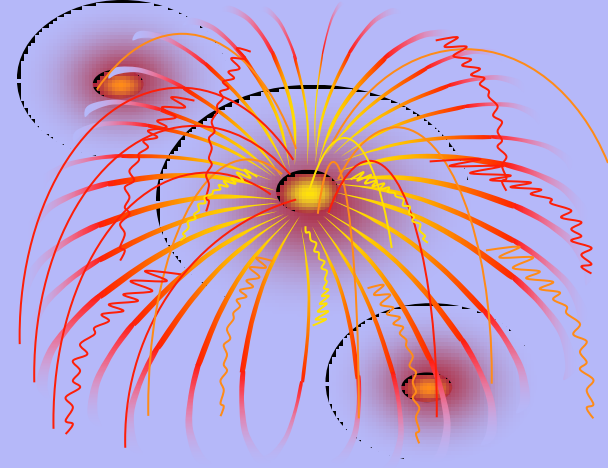
Celluloid Dolls



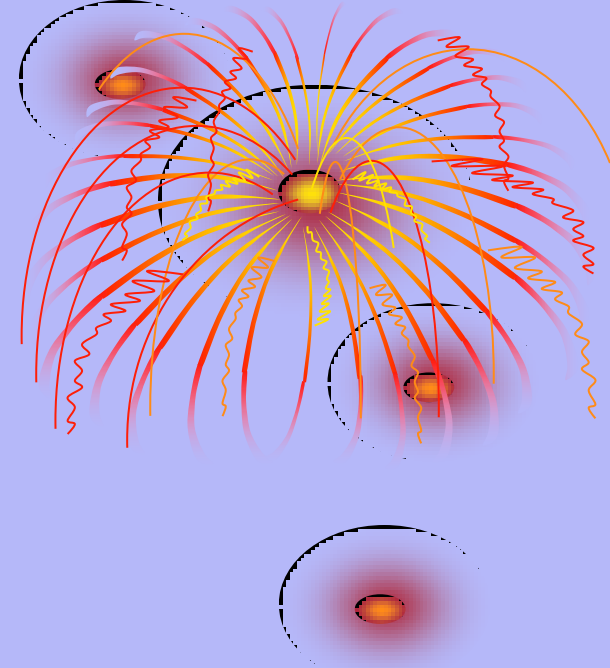
Celluloid Sewing Box and Pen Case



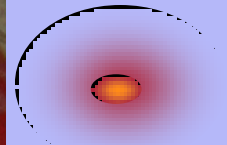
Celluloid Lantern



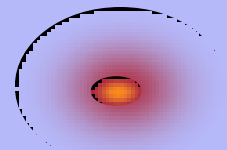
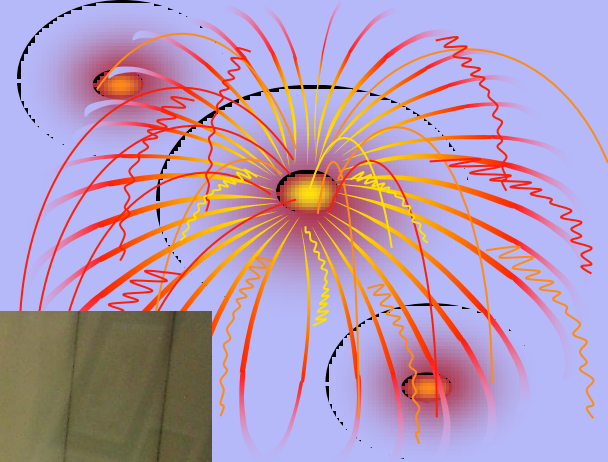
Celluloid Lantern



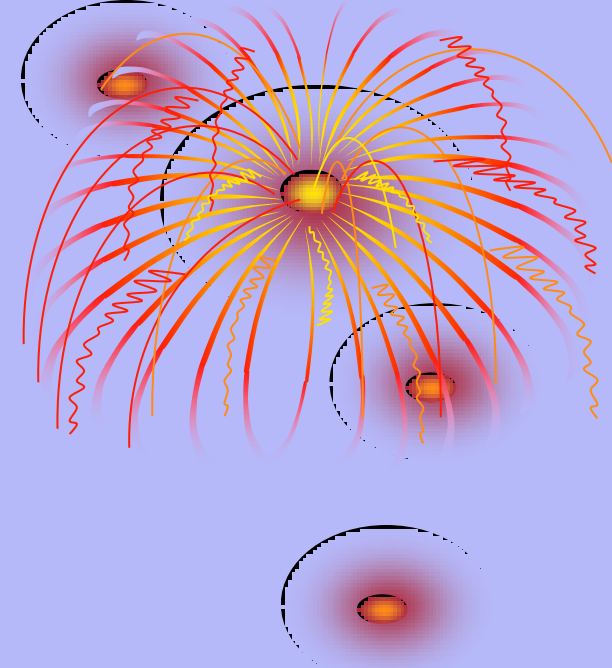
Celluloid Greeting Card



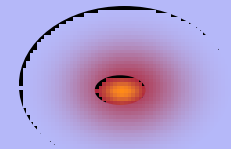
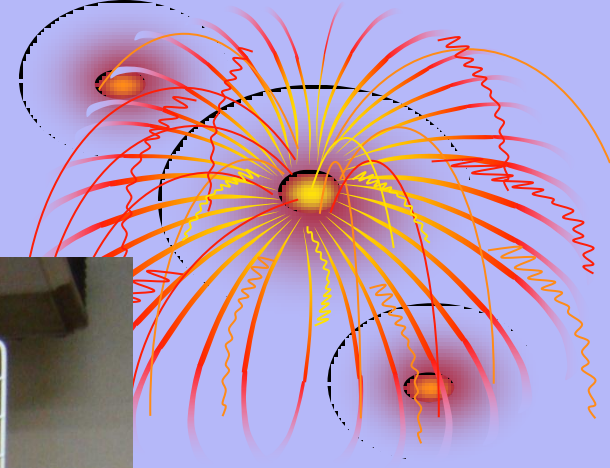
Celluloid Greeting Card



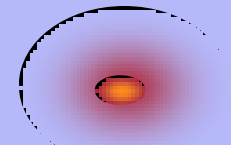
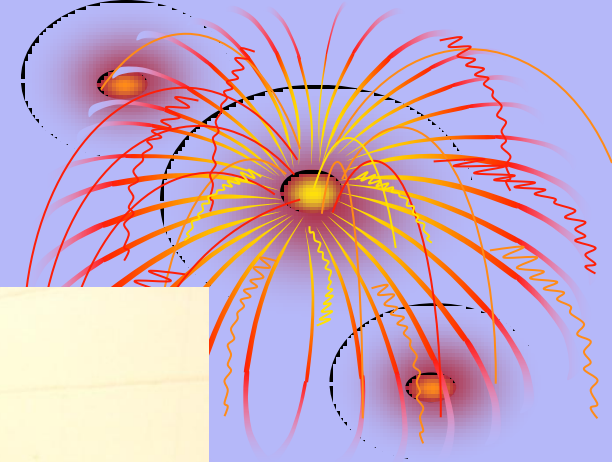
Celluloid Medical Goods



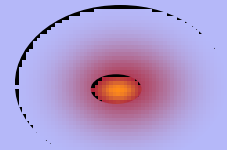
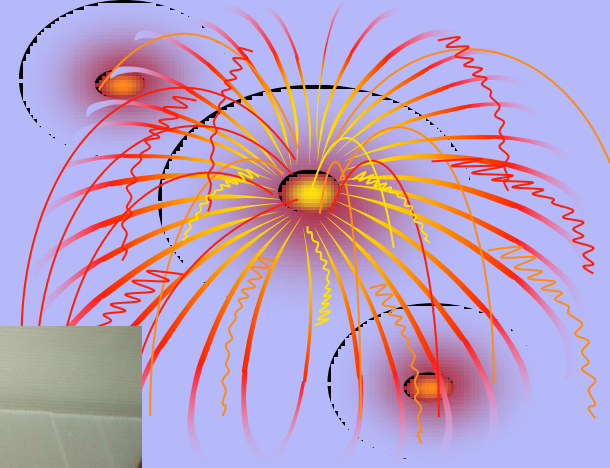
Festival Items



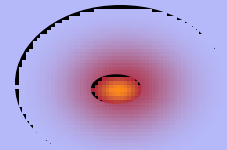
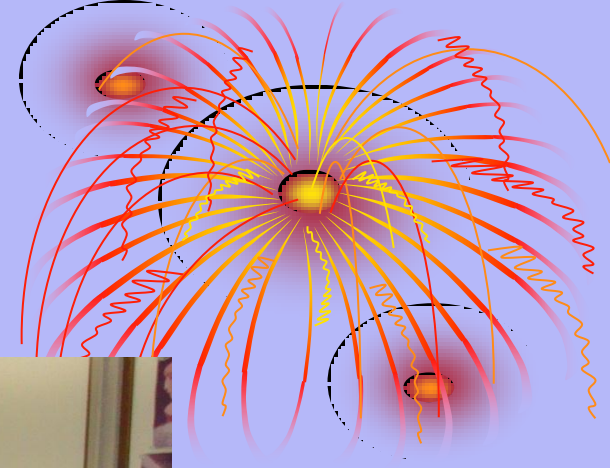
Celluloid Mold

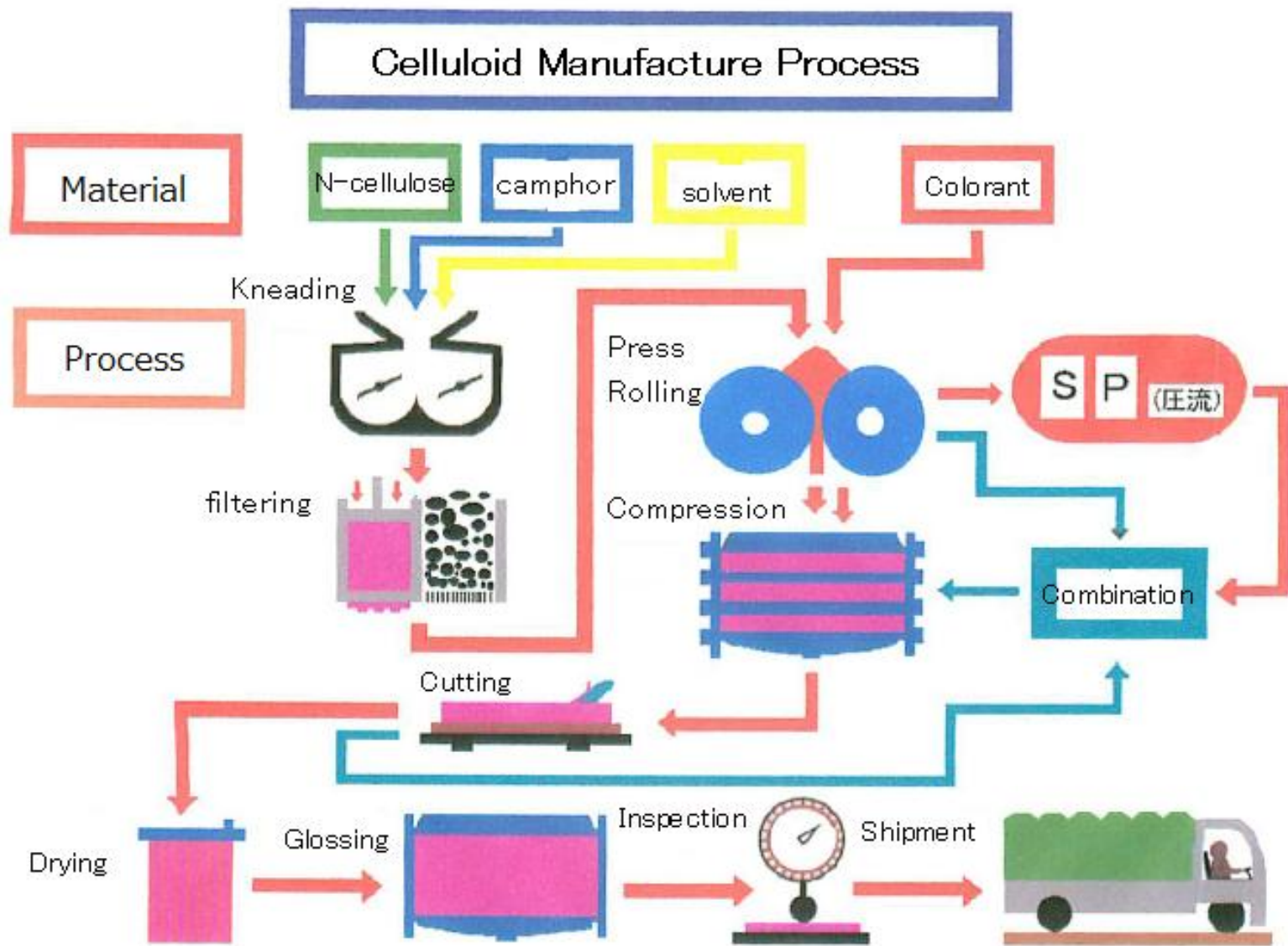


Celluloid Mold

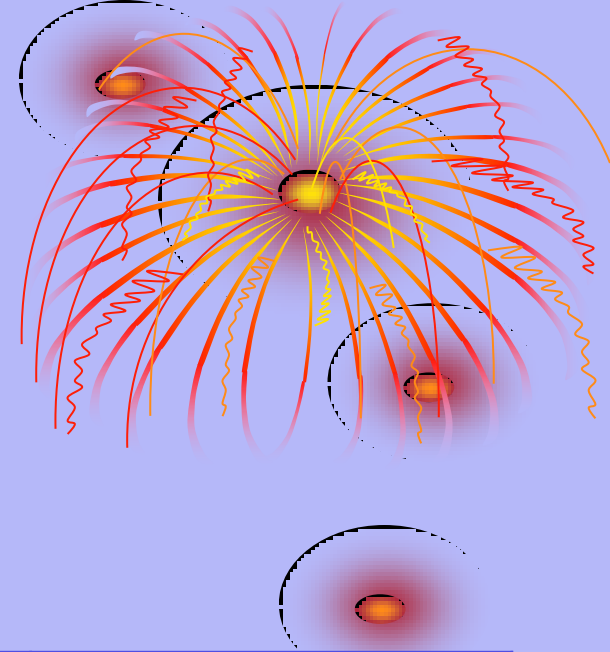


Celluloid Tooling Equipment



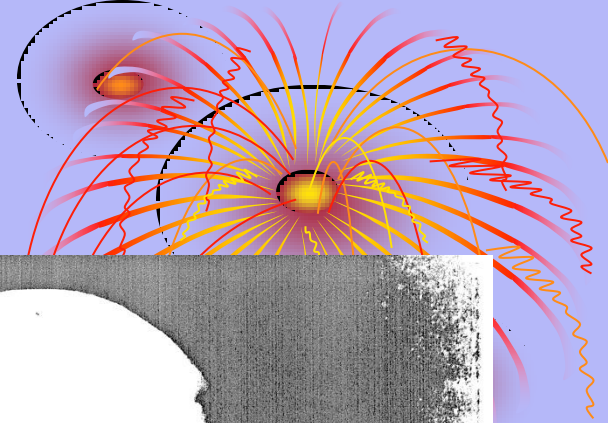
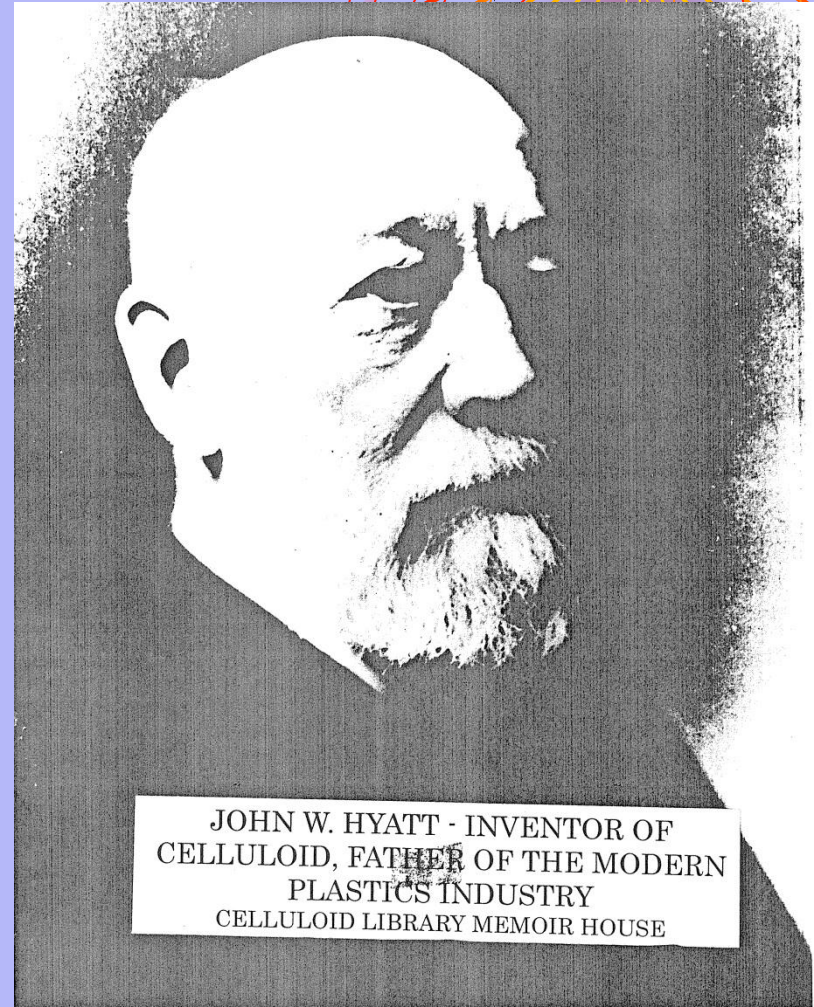


World Great Persons of Invention in Celluloid History



	Country	Birth	Death	Ocupation
A. Parkes	UK	1813.12.29	1890.6.29	Metal Fabrication
J.A.Cutting	U.S.A.	NA	NA	Photography
D.Spill	UK	1832.2.11	1887	Medical
J.W.Hyatt	U.S.A.	1837.11.27	1920.5.25	Printing

Photo of John W. Hyatt



UNITED STATES PATENT OFFICE.

JOHN W. HYATT, JR., OF ALBANY, NEW YORK, AND ISAIAH S. HYATT, OF
ROCKFORD, ILLINOIS.

IMPROVED METHOD OF MAKING SOLID COLLODION.

Specification forming part of Letters Patent No. 91,341, dated June 15, 1869.

To all whom it may concern:

Be it known that we, JOHN W. HYATT, JR., of the city of Albany, in the State of New York, and ISAIAH S. HYATT, of the city of Rockford, in the State of Illinois, have invented a new and useful Method of Making Solid Collodion, or compounds of pyroxyline; and we do hereby declare the following specification to be a true and exact description of the nature of our invention.

Our convention consists of a new and improved method of manufacturing solid collodion and its compounds; its essential feature being the employment of a very small quantity of ether or other appropriate solvent, and dissolving pyroxyline therewith, under a heavy pressure, so that a comparatively hard and solid product is obtained, with great economy of solvents and saving of time.

The following description will enable others skilled in the art to use our process:

We place soluble cotton, pyroxyline, or prepared cellulose into a strong cylinder or suitably-shaped mold. With the pyroxyline may be mixed ivory-dust, bone-dust, asbestos, flake-white, or any other desirable substance, according to the nature of the product required.

This compound is then pressed into a tolerably compact mass by means of a plunger in the cylinder, or by a movable part of the mold. The plunger to said cylinder or part of the mold is then retracted to give room for the ether or other solvent. The proportion of solvent to the pyroxyline is as five to ten, seven to ten, or equal parts, by weight, according to the nature and proportions of the compound. When the pyroxyline is used alone, from one-half to three-fourths, by weight, of solvent will be sufficient; but when ivory-dust or other material is added, a somewhat greater proportion of solvent will be required, which can readily be determined by trial. After the plunger to the cylinder or part of the mold has been retracted, as aforesaid, the

solvent is poured or forced in through a hole, which is then closed, and the plunger or movable part of the mold is immediately forced against the contents with great power—a pressure of from five to twenty tons per square inch being required to produce the best results. The pressure must be applied quickly, so that the solvent will be forced into contact with every particle of the pyroxyline before the dissolving process has time to commence. This, however, may be varied according to the degree of activity of the solvent employed. The cylinder or mold must be made or packed to work so closely that none of the solvent can escape the pressure. Other mechanical means may be employed equivalent to the foregoing, and we do not confine ourselves to the precise apparatus described.

The product is then taken out of the cylinder or mold, and will be found to be hard and solid, of uniform quality throughout, and liable to only a very slight degree of shrinkage, because of the very small proportion of volatile elements which it contains.

After the solid compound thus formed is taken out of the cylinder or mold, and before it thoroughly seasons, we subject it, in the manufacture of many articles, to additional pressure in molds, whereby it is caused to conform perfectly with all the configurations of the mold.

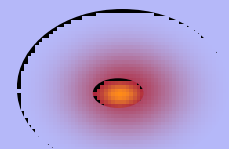
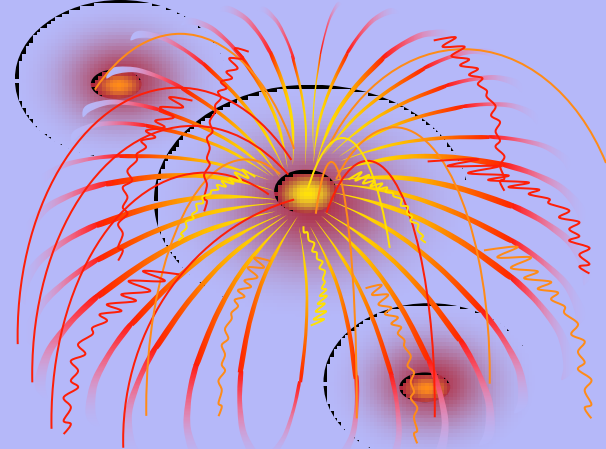
Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. Dissolving pyroxyline under pressure, substantially as described.
2. Dissolving pyroxyline under pressure, when combined with ivory-dust or other material, substantially as described.

JOHN W. HYATT, JR.
ISAIAH S. HYATT.

Witnesses:

HENRY DEITZ,
C. M. HYATT.



One of Important Patents



A.D. 1865, 11th MAY. N° 1313.

Manufacture of Compounds of Pyroxyline.

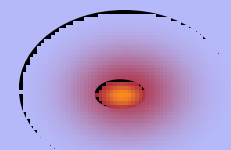
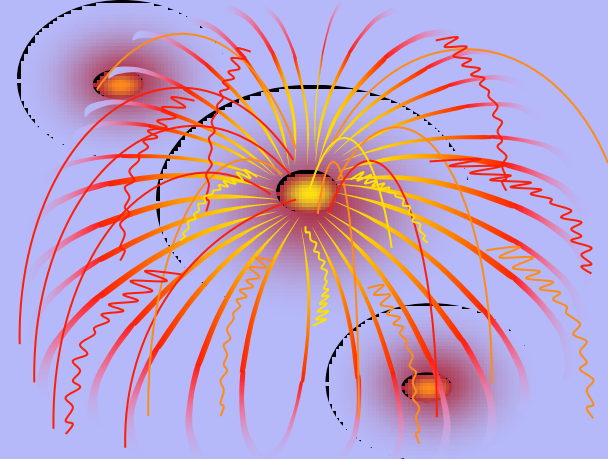
LETTERS PATENT to Alexander Parkes, of Birmingham, in the County of Warwick, for the Invention of "IMPROVEMENTS IN THE MANUFACTURE OF PARKESINE OR COMPOUNDS OF PYROXYLINE, AND ALSO SOLUTIONS OF PYROXYLINE, KNOWN AS COLLODION."

Sealed the 7th November 1865, and dated the 11th May 1865.

PROVISIONAL SPECIFICATION left by the said Alexander Parkes at the Office of the Commissioners of Patents, with his Petition, on the 11th May 1865.

I, ALEXANDER PARKES, of Birmingham, in the County of Warwick, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN THE MANUFACTURE OF PARKESINE OR COMPOUNDS OF PYROXYLINE, AND ALSO SOLUTIONS OF PYROXYLINE, KNOWN AS COLLODION," to be as follows:—

This Invention has for its object improvements in the manufacture of parkesine or compounds of pyroxyline, and also solutions of pyroxyline known as collodion. The materials now well known as parkesine consist of pyroxyline dissolved in or softened by solvents and usually mixed with coloring matters, oils, and substances which control the inflammability of the pyroxyline. In manufacturing parkesine some difficulties are experienced in consequence of the high volatility of the solvents heretofore employed. According to my present Invention I employ as solvents of the pyroxyline in this manufacture nitro benzole, aniline, and glacial acetic acid; when these solvents are employed the



One of Parkes Patents

Nothing's as cute as a Kewpie doll

By **LINDA ROSENKRANTZ**
Copley News Service

Not many dolls manage to get their names in the dictionary, but the Kewpie is one that has. It's an almost inevitable synonym for cuteness, with its big googly eyes, mischievous grin, naked pot-bellied body, small wings and distinctive

topknot. It's an image that has been enormously popular for almost a century.

The Kewpie started out not in three dimensions but two, making its initial appearance in the Woman's Home Companion magazine in December 1909 in the form of pen-and-ink illustrations drawn by Rose O'Neill, a multifaceted commercial artist who had been working

professionally since the age of 17.

Before long, the cupidlike character, which she claimed appeared to her in a dream, was seen in many illustrations (often for O'Neill's own poems) and advertisements in a variety of publications, including Ladies' Home Journal, which ran it as a series. In 1910, she wrote and illustrated a children's book, "The Kewpies and Dottie Darling," the first of several, which made the image more widespread.

It soon became clear that there would be a market for a three-dimensional version of the popular character,

and one of the first companies to display an interest in marketing Kewpie dolls was the New York firm of Geo. Borgfeldt & Co.

When a 17-year-old student at Brooklyn's Pratt Institute by the name of Joseph Kallus surpassed other competitors in 1912, he was hired to carve Kewpie dolls and figures. It was decided that they would be manufactured in Germany, where porcelain production was less expensive.

The process for translating O'Neill's drawings into figurines consisted of Kallus' rendering a model in clay,

from which a plaster mold could be made. For bisque and porcelain production, liquid porcelain slip was poured into the mold. When it was released, additional features were applied. The finished figure was then baked in a kiln at a very high temperature.

Following that, the figure was painted and decorated, and then fired to incorporate the color. Bisque Kewpies (referred to as action Kewpies) were made in various forms — there were pairs known as "Huggers," Rodinlike "Thinkers" and "Travelers" equipped with an umbrella

and suitcase, not to mention others that represented various professions, such as Aviator, Bellhop, Lawyer, Policeman and Sailor.

The bisque figures were just the beginning. After that came dolls made of lulooid, cloth, composition rubber, vinyl, zylonite and other materials. Kallus started several doll companies of his own; the longest-lasting was the Cameo Doll Co., which made dolls from 1912 to 1982 and produced most of the composition Kewpie

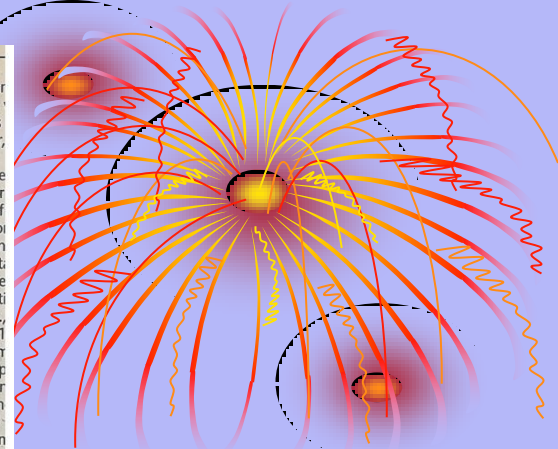
Almost from the beginning, there was an extensive family of Kewpie-related characters: the more-hun Scooties, a little female traveler who "scooted" all over the world and was also known as The Baby Tourist; Wag, the captain of the band of Kewpies; Kate O'Kewpie; Doty Darling and her Baby Brother; and the Kewpie Doodle Dog, a bl version of Scooties — all of whom resided happily in land of Kewpieville.

Recent reference

"Collecting Rose O'Neill Kewpies" (Schiffer) is written with considerable authority — its authors, David O'Neill and Janet O'Neill Sullivan, are the grandchildren of the artist's brother, knew the artist well and have collected Kewpies all their lives.

After providing biographical information, the book treats bisque Kewpies, providing copious illustrated and priced examples, as it does with Kewpie china patterns, lamps, bookends, clocks, trays, toys and other metal objects, plus a miscellany of other Kewpie items — more than 540 in all, everything but the non-bisque dolls. An older volume that is still a valuable reference is "Kewpie Dolls Art" by John Axe, published by Hobby House.

Linda Rosenkrantz has edited Auction magazine and authored 14 books, including "Cool Names." She cannot answer letters personally.



HARDWOOD FLOORING

LOWEST PRICES ANYWHERE
SUPER DEALS THROUGH AUGUST 16, 2003

• 2-1/4" SOLID OAK FLOORING
All grades and widths of oak
flooring available. All at the
lowest prices anywhere.
Starting at.....\$9.95 sq. ft.

Bellawood
HARDWOOD FLOORING FOR LESS!

• PREFINISHED
3/4" SOLID FLOORING
Over 72 types available, oak,
maple, ash and exotics. This is
the best prefinished available.
50 year finish warranty.
Prices now start at.....\$2.95 sq. ft.

www.bellawood.com
• Do-it-yourself tool rentals
• Need an Installation Pro?
Names available in store.

While Supplies Last

LUMBER LIQUIDATORS
HARDWOOD FLOORING FOR LESS!

(860) 527-8434
231 Brainerd Road
Hartford
(Brainerd Rd. exit off
I-91 next to Days Inn)

Open:
Mon-Sat 8-5, Sun 12-5
We Deliver Anywhere
www.lumberliquidators.com

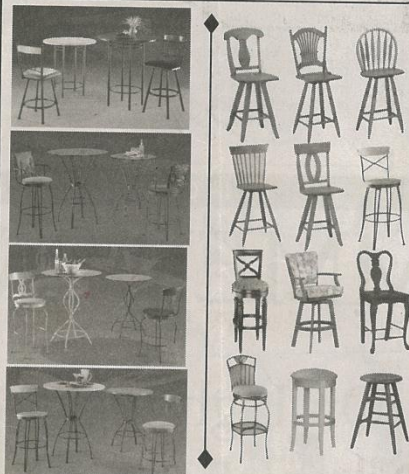
• 2 1/2" PREFINISHED
BLOODWOOD
FLOORING.....\$4.85 sq. ft.
with BELLAWOOD 50-year finish

• 5" PREFINISHED SELECT
KOA FLOORING.....\$4.95 sq. ft.
with BELLAWOOD 50 year finish

• 3" PREFINISHED BRAZILIAN
CHERRY LIGHT MOABI
FLOORING.....\$2.97 sq. ft.
with DURAWOOD 15 year finish

ONLINE AUCTION!
Buy our old lots cheap
www.lumberliquidators.com

Tomorrow's Heirlooms....



Lowest
PRICE
Anywhere
Guaranteed!



Over 200
Bar & Counters
Stools and Dinettes
on Display
DESIGN YOUR OWN
2 sections to 25 sections
The • Marble • Glass • Oak • Cherry
Maple • Oak • Pine • Formica • Chrome
Mirror • Metal • Services

Bond Dinettes Inc.

2691 Berlin Tpke., (Rt. 15) • Newington • (860) 666-2044

Mon. 10-8; Tues.-Sat. 10-5:30; Sun. noon-4

FREE DELIVERY & SET-UP*

Visit our website at www.BondDinettes.com

Only in Newington CT



**AFFORDABLE
SOLID WOOD FURNITURE**

• Living, Dining and Bedroom
• Magazine racks, coat racks,
plant stands, stools, hall
trees, rockers, etc.

Handmade Amish Quilts

HOUSATONIC HARDWOODS
100 yards East of
US Route 7 on
State Route 341 Kent, CT
(860) 927-3551
www.hardwoods.com

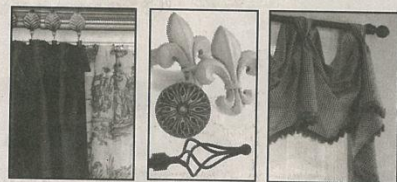


**AFFORDABLE
WIDE PLANK FLOORING**
Solid native hardwood flooring
at affordable prices
- oak, cherry, maple, ash and
others.

HOUSATONIC HARDWOODS
100 yards East of
US Route 7 on
State Route 341 Kent, CT
(860) 927-3551
www.hardwoods.com

Country Curtains

curtains bedding rods top treatments
lamps rugs gifts and more!



visit us for all the newest window treatments!

store hours: mon-wed, fri. & sat 10-6, thur. 10-7, sun 12-5

32 west main street

route 44, avon, ct

860-678-7237

www.ccretailshops.com

News Articles on Kewpie Doll

(The Hartford Courant,
August 7, 2003)

DESIGN.

R. O'N. WILSON.

DOLL.

APPLICATION FILED DEC. 27, 1912.

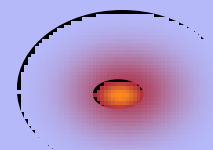
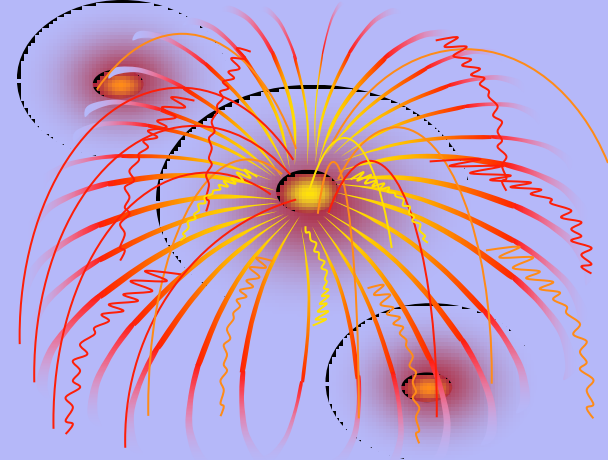
43,680.

Patented Mar. 4, 1913.

Fig. 1.

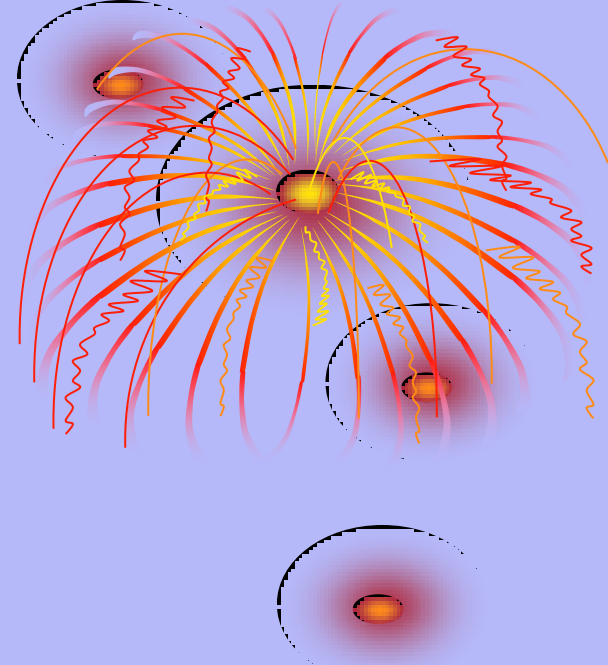


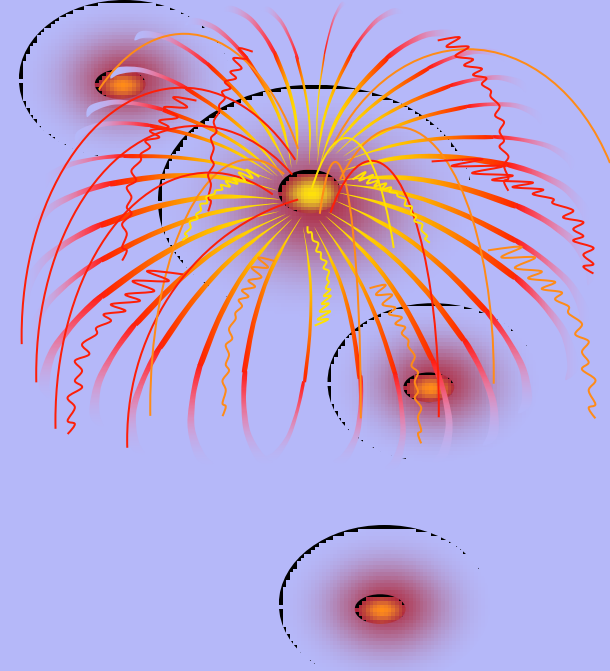
Fig. 2.



**Original Patent
of Kewpie Doll**

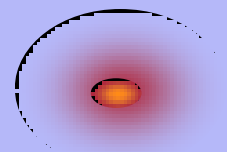
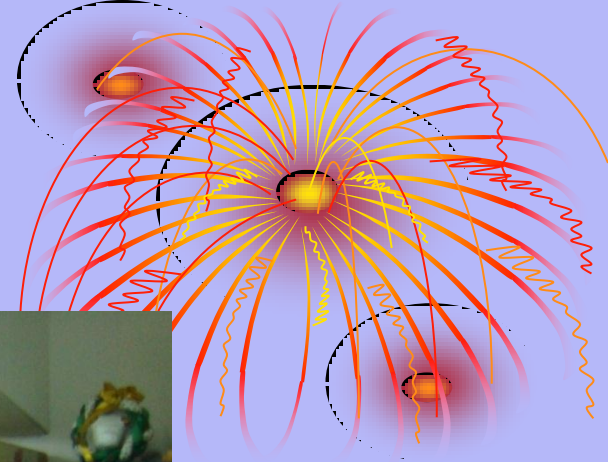
Celluloid Dolls



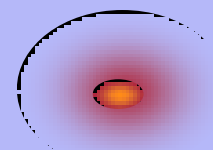
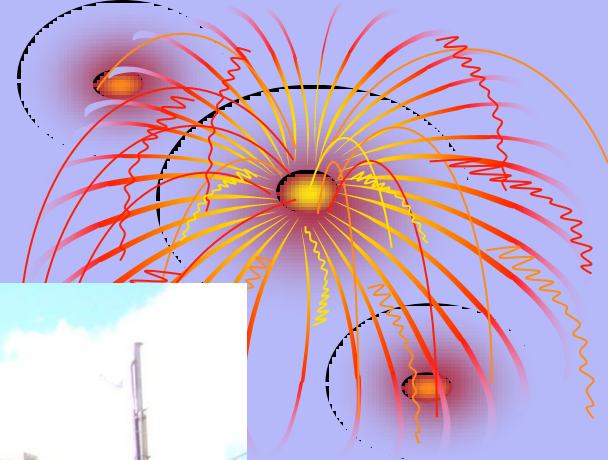


Celluloid Lady's Figure

Celluloid Library



Celluloid Yokohama Museum



Stored Items

**Books · Literatures · Reference
Materials · Photo & Videos**

15, 000

Celluloid Collectibles

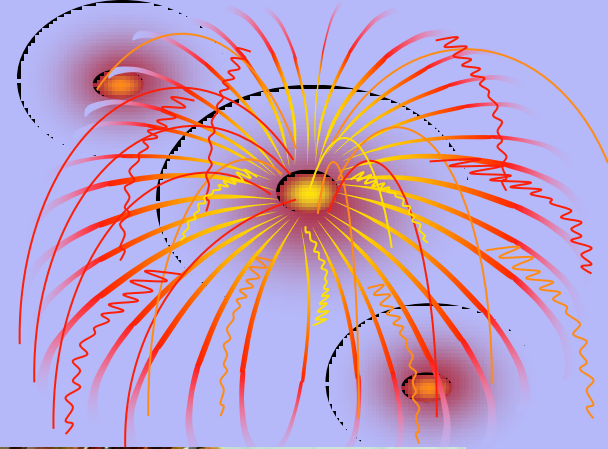
50, 000

**Celluloid Sheets and Semi-
Product**

15, 000


Molds & Cutting Dies

1, 000





**Thank you for your Listening of
my presentation**



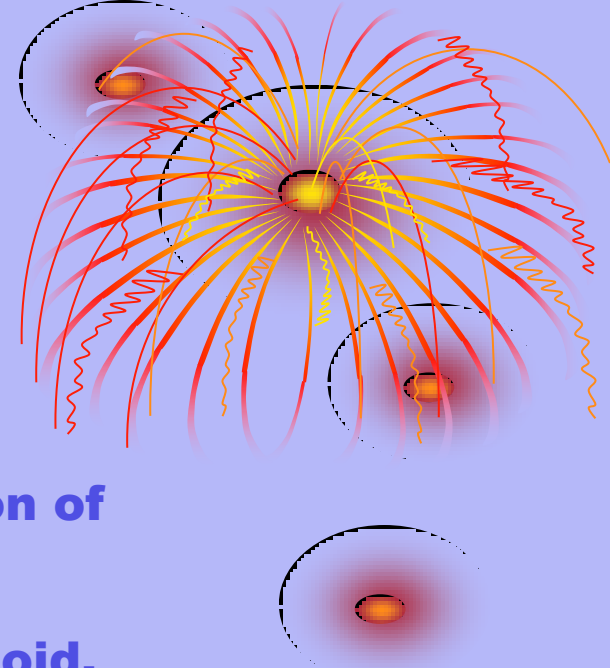
**I am sure Celluloid brings you
fond memory of the past decades
and friendship between people in
the world.**

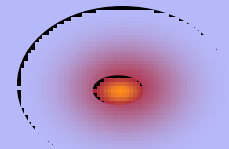
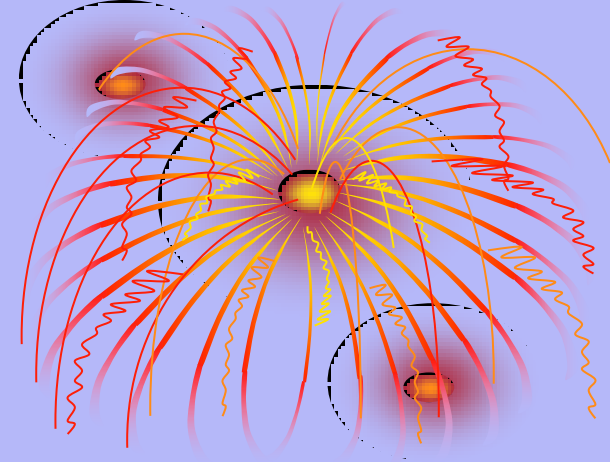
Celluloid



Our Museum Activities and Challenge in 2012 to 2013

- **Research of the rise and fall of Celluloid Industries in Japan and other countries.**
- **Study on Techno Cultural impact of invention of Celluloid in Japan society**
- **Citizen Program of Friendship through Celluloid.**
- **Educational program on past achievement of celluloid to younger generation.**
(Celluloid is one of important invention in field of the material science in 20th century and widely used in movie films, toy, beauty & charm, figures, Ping-Pong ball, ornaments, household items and other various articles. **Kewpie dolls are most well-known by everybody.**)
- **Collection of Celluloid and related publications and published books as well as literatures.**





Thank you

特集 セルロイド



かつて世界の生産国であった、
日本のセルロイドが創り出した昭和の文化の遺産を保存する

セルロイドメモワールハウス横浜館

最初のセルロイド状物質は1861年（万延2年）にイギリス人アレキサンダー・パークスによって初めて作られました。しかし実用化には至らず、1868年（明治元年）アメリカ人ジョン・ウイスレイ・ハイヤットによってビリヤードの玉の原料として実用化され、彼の製造会社の商標としてセルロイドが登録されました。セルロイドはその後映画や写真フィルム、万年筆の軸、眼鏡のフレーム、文房具や玩具などの原料として使われるようになり需要を伸ばします。

日本では1908年（明治41年）に三井・三菱が、大阪・堺と兵庫県姫路市・網干で製造を開始し、1937年（昭和12年）には世界の生産高の40%を占

めるまでになります。しかし、発火し易いこと。光で劣化し、耐久性が低いなどの欠点を持っていて、セルロイドの火災事故の多発を受け、1955年（昭和30年）アメリカで可燃物資規正法が成立。これを期に世界のセルロイドの生産は落ち込み、現在ではセルロイドに代わる難燃性のアセテート材料を入れた各種プラスチックが登場したために、ピンポン玉や人形、ギターピック、万年筆の軸、眼鏡のフレームなどにわずかに使われているに過ぎません。

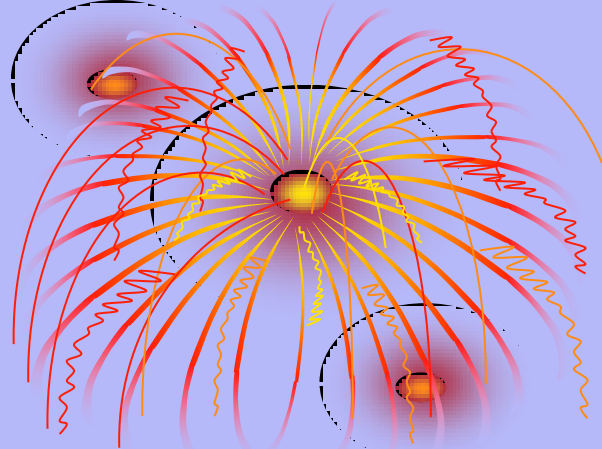
わずか100年しか活躍できなかったセルロイドですが、美しい色彩、肌触りの良さ、質感の良さなど製品の存在感が大きく、現在でも多くのコレクターが存



在します。

そうした多くのコレクターの中でも、飛び抜けて多くの製品を収集しているのがセルロイドメモワールハウス横浜館の館長岩井薫生さんです。

今回は岩井さんをはじめ、工学博士の大石不二夫さん、館長代行の野木村政三さんに、セルロイドに関する様々なエピソードをお聞きすると同時に、今では見ることもできない貴重なセルロイドの製品を見せていただきました。



Introduction of Celluloid Museum in Japanese edition



▶このセルロイドメモワールハウス横浜館を作られたキッカケは？

この建物は私と父親とで設立した大日本樹脂研究所の研究棟でした。プラスチックの材料を研究する会社で、研究棟の移転に伴い、建物はそのまま残してプラスチックの原点でもあるセルロイドに関する資料を集めることを思い立ちました。

セルロイドは、今日の社会や文化に多くの影響を与え、広く産業全般に貢献し、その歴史的意義は大きいものです。この貴重な産業文化遺産が、いわゆるスクラップ・アンド・ビルドによって散逸してしまうことを恐れ、産業文化の研究資料として残すことを目的に収集を開始しました。



▲金型



▲金型から出来た人形

収集は骨董市を回ったり、友人を頼ったり、多くの方々の応援を得て、海外からの協力もあり、人形をはじめ、石けん箱、靴バラ、映画のフィルム、アコーディオン、ボタン、変わったところではヨーロッパ製のグリーティングカードなどの製品に加えて、それらを製造するプレス機や金型なども収集することができ、その数は約5万点に達しています。

このセルロイド製品の収集展示をハードウェアとすればソフトウェアとしてセルロイド産業文化研究会を1999年（平成10年）に立ち上げ、「セルロイド玩具の文化史」「セルロイドの柄と組み立て」といったタイトルで、セルロイドの製法や社会に与えた影響などを研究しています。

▶セルロイドはどのようにして作られたのでしょうか？

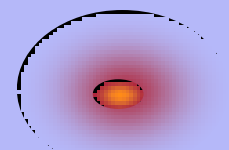
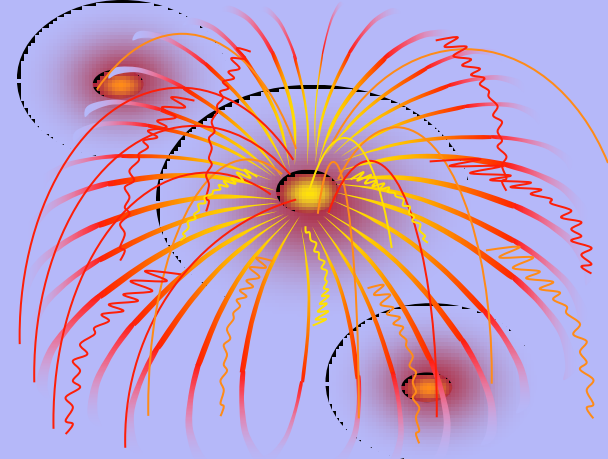
セルロイドは世界で最初に作られた半

合成樹脂です。

アメリカ人のジョン・ウイスレイ・ハイヤットが、ビリヤードの玉に使われていた象牙の代用品として、硝化綿と樟脳から1868年に作り出したといわれています。セルロイドという名前は、セルロースと「・・・に似ている」の接尾語のoidとを組み合わせた造語ということが知られています。しかしハイヤットがセルロイド製造の第一号というわけではなく、1861年にイギリス人のアレキサンダー・パークスが硝化綿と樟脳からパークシンという固液体を作り出しますが、原料の質が劣っていたために実用化には至りませんでした。

▶セルロイドの製法を教えてください。

綿花から長い繊維を取った後の種子に残っている短い繊維をリンターといいますが、このリンターを硫酸と硝酸で硝化させた後、水洗洗浄したものを硝化綿といいますが、この硝化綿に樟脳、溶剤を入れ





練り合わせます。

次にフィルターで異物を取り除き、圧延機にかけ圧延しながら、セルロイドの組織を均一にし、次の圧搾工程のプレス枠内に入る寸法に切り揃えます。

圧搾工程は蒸気で加温しながら、3～6時間かけて溶融。続いて圧力をかけたまま水冷で溶融物を固めるとセルロイドブロックが出来上がります。

こうして出来上がったブロックを所定の厚さに裁断し、乾燥、艶付けを行なって完成です。

一方模様の付いた柄物セルロイドを作るには、数種の色物生地を組み合わせ、圧搾し裁断すると、模様を持ったセルロイドが出来上がります。

着色には染料、顔料を使用しメタリックに仕上げるためには、パールエッセンス使用したり、太刀魚の鱗を使用したりします。

▶5万点の収集品の中でも岩井さんが最も大切にしているものは？

セルロイドを製造する機械、人形の金型、石鹸箱や筆箱などの文房具、水筒、櫛、かんざし、万年筆、戦後の日本の重要な輸出品だった人形など昭和の人々の生活を彷彿させる様々なものを展示していますが、中でも私が興味を持っているのは「グリーティングカード」と「根



▲グリーティングカード

付」です。クリスマスカードを送る習慣が一般的になったのは1840年代のイギリスといわれています。そのカードの中でも一番豪華なカードは象牙のカードでした。加工性に優れている象牙は紙のように薄くすることが出来たのです。最もこのようなカードを送ることができたのは、王室や貴族だけだったでしょうが、そこにセルロイドが登場したのです。セルロイドの登場が象牙製のビリヤードのボールの代わりだったように、今度はカードの代わりを務めたのです。

収集して気づいたのはカードに描かれた絵やデザインに興味を惹かれるのと同時に、何時、誰が誰に宛てて送ったかわかることです。約100年前のヨーロッパの生活を知る上で貴重な資料になることでしょう。

根付は、これぞ日本の職人芸と感嘆するものばかりです。わずか数センチの大きさの貝の中に彫った七福神を入れたり、肥後桶を担ぐ人物を彫ったり、江戸時代の工芸品を見るようで、一日中見ても飽きることがありません。

▶最後に岩井さんにとってのセルロイドの魅力は？

プラスチックと比べると一番簡単だと思いますが、セルロイド製品は僕だけに限らず収集する人がいますが、プラスチックの製品を収集する人はいません。セルロイド製品には人を惹きつけるオーラがあると言っても良いかも知れません。手にした時の柔らかい触感。万年筆の軸を例にとれば、美しい色彩、複雑で立体的な文様、加えて、他の素材では得ることのできない温かい触感などがあり、燃え易い、耐久性に欠けるなど欠点はありませんが私たちが惹きつけてやまない素材です。

